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ANNUAL MEETING OF LAKE CARRIERS.

Detroit, Mich., Jan. 18.—Only a year or two ago some of the leaders in the Lake Carriers' Association had about made up their minds that a general reorganization of its affairs would soon be required. Vessel property on the lakes was gradually drifting into big hands and the individual owners, so-called, were getting fewer in number each year. The wooden vessels, and especially those of the smaller class, were soon to have no place, it was said, in this great carrying trade. They were to be shut out by the big freighters of 6,000 to 8,000 tons or more capacity. All this is still true of the future but the boom of the past year has changed the situation, at least, for another season or two. The gathering of the Lake Carriers here during the past two days has found the smaller owners very much in evidence, and there will be more of them in the association next year than for two or three years past. Their profits next year, on the basis of contracts already made, will be even greater than during 1899. They are not, of course, in control of the association, but the reorganized body of a few representatives of very large interests is still a matter of the future.

Buffalo sent newspaper representatives to the meeting this year and there was a large delegation from the labor organizations interested in the grain shoveling contract, including P. J. McMahon, president of the grain-shovelers union, Rowland B. Mahany, counsel for the union, and President Keefe of the longshoremen's organization. The grain-shoveling question at Buffalo was heralded as the one important matter to come up at the Detroit meeting. It is, true enough, a subject meriting special attention from the vessel owners, and it will have the care of some of the best men in their organization, but for all that was done here the Buffalo people might as well have stayed at home. As much might have been said to them long before the meeting opened, in view of the conditions that exist at Buffalo this year. At these annual meetings everybody has his say. Discussion is free and unlimited, but important questions are in almost all cases referred to select committees, with the understanding that they are to give them deliberate and careful attention. So it was with the grain-shoveling matter. The committee simply granted a hearing to everybody who wanted to be heard, received bids for the work, reported progress, and was continued, with the understanding that they are to act with the executive officers of the association and take all the time necessary until the opening of navigation to complete their work. The committee is a very strong one. It is composed of L. C. Waldo, Edward Smith, M. M. Drake, C. A. Brunn, A. B. Wolvin, A. W. Colton, James Corrigan, D. Sullivan, W. E. Fitzgerald, Thos. Cranage and Howard Shaw.

W. J. Conners did not submit a bid. It was not expected that he would do so, notwithstanding all that was said to the contrary just previous to the meeting. A bid was submitted by James Kennedy, who was the first contractor, and also by several Buffalo men who were said to be acceptable to the shovelers. But it is true that these latter bids were complicated and could not be hastily considered, even if it was desired to do so. So the matter rests with the committee of vessel owners to thresh it out. They will undoubtedly try to turn the work over to the elevators, if it can be done, as this is the desire of most members of the association. Labor troubles in Buffalo next spring will certainly be avoided if at all possible, but the committee will have the full support of the association in anything they may do.

Next to the grain shoveling question, the most important action of the meeting was that of sending a strong delegation to Washington to secure at the earliest possible moment appropriations for beginning three very important improvements in connecting channels between Lake Superior and Lake Erie. First of these and of most immediate importance is the construction of a second channel through the most difficult parts of the Sault river; second, the construction of a second canal at St. Clair flats, and third, the widening of the Lime-Kiln crossing to 800 feet. All these propositions are urgently endorsed by the government engineers. It is appalling to think, as Secretary Keep says, of the damage in dollars and cents that results from accidents like the two of last season that blockaded the Sault river. The whole history of the improvement of the St. Mary's river, the commerce of which is now four times what it was ten years ago, teaches the lesson that work begun by the government at the first warning, is not completed in time to cope with the increase in number, size and capacity of vessels.

One other very important action of the meeting was the adoption of certain changes in the navigation rules of the Sault river, prompted mainly by the recent accidents, that will undoubtedly meet with the approval of the secretary of the treasury and be made effective on the opening of navigation next season.

DETAILED ACCOUNT OF PROCEEDINGS.

The opening session on Wednesday morning, Jan. 17, was called to order by the first vice-president, Thomas Wilson of Cleveland, in the absence of the president. Secretary C. H. Keep first read a letter from Mr. Frank J. Firth, president of the association, who is in Europe. President Firth expressed sincere regret that he was unable to preside at the meeting and thanked the association for honors bestowed upon him. He referred to the burden of the Buffalo grain shoveling trouble and the vigorous manner in which it was handled by the counsel of the association, Mr. Harvey D. Goulder, and the members of the association. He suggested that definite action on important questions be avoided and that these questions after full discussion be referred to standing committees. "I am gratified to be able to call your attention," Mr. Firth said in conclusion, "to the fact that your membership has included this year the largest vessel tonnage of any year since its organization. The year has been one of exceptional prosperity for our entire country and in this general prosperity the members of your association have fully shared. It is my thoughtful judgement that no owner of even a single vessel upon the great lakes should be found outside of your membership. I trust none may remain outside during the coming year."

The secretary followed with the presentation of the report of the board of managers and that of Capt. George P. McKay of Cleveland, the treasurer, both of which were on motion adopted. These reports are printed in full elsewhere. For the first time probably in its history the association is practically out of debt with a very large increase in tonnage for the past year. The total tonnage is 760,866, an increase of 75,000 tons over the previous year. It was explained in the report of the managers that this tonnage increase was not due to new vessels coming out but to the enrollment of vessels already in commission, which was prompted in part by improved conditions of business. The managers' report also expressed great satisfaction with the condition of the treasury. It was more gratifying than for several years past. There was collected in dues $21,500 in round numbers. Some of the old debts of the organization were paid off, so that the deficit in the form of unpaid liabilities was only $400. A year ago it was $2,500. From the report of the chief shipping master it was found that 16,681 men were placed aboard vessels in 1899, against 16,508 in 1898, 13,139 in 1897 and 11,383 in 1896. Expenses of the shipping offices aggregated $10,648.07, or about 42½ per cent. of the entire expenses of the association. The cost of shipping offices per man put aboard vessels was about 64 cents.

Following this summary of tonnage, finances, etc., the managers' report discusses at great length the history of the grain shoveling trouble at Buffalo, and then recommends the establishment of an international commission to consider and deal with the problem of maintaining the water levels of the great lakes. This recommendation, brought on mainly through the construction of a very large power canal at the Sault, was, of course, taken up later on in the meeting. It is claimed that the power canal company's plans call for structures in the unnavigable part of the St. Mary's river that will compensate fully for water drawn from Lake Superior through the canal. The report also recommends that an immediate effort be made in congress to secure appropriations for Sault river improvements that will provide two channels through the most difficult part of the river. All these matters were, of course, taken up by committees.

An invitation from the mayor of Milwaukee and from the secretary of the Citizens' Business League of that city that the next convention be held in Milwaukee was received with thanks and with the understanding that an explanation be sent to these officials of the fact that the constitution provides that all meetings be held in Detroit. The report of A. R. Rumsey, chief shipping master, which is summarized in the report of the board of managers, was read and accepted, and Secretary Keep noted the receipt of several applications for the enrollment of new tonnage. Mr. H. Coulby of Cleveland called attention to the fact that there was pending action on a resolution which he had offered at the last annual meeting to strike out that clause of the by-laws making a president of the organization ineligible to re-election. A rather lengthy discussion was entailed and when the resolution was finally put the question of its adoption was lost by a vote of 19 to 18, a two-thirds vote being required for adoption.

ELECTION OF OFFICERS.

The election of a president was taken up immediately upon the opening of the afternoon session. Both Mr. Wm. Livingstone and Mr. J. G. Keith, who had been mentioned for the place with Mr. W. C. Farrington of Buffalo, had agreed two or three days ago that there should be no contest. Mr. Livingstone was in the east. Mr. Farrington was also unable to attend the meeting. Mr. Keith nominated Mr. Farrington and the choice was unanimous. Then Mr. Keith was unanimously elected first vice-president. The other executive offices are to be as they have been for several years—Harvey D. Goulder, counsel, C. H. Keep, secretary, and Geo. P. McKay, treasurer. The following committee was then named to select other officers for the ensuing year: M. A. Bradley of Cleveland,

W. C. FARRINGTON, BUFFALO.

PRESIDENT OF THE LAKE CARRIERS' ASSOCIATION.

J. J. H. Brown of Buffalo, G. W. Maytham of Buffalo, James McBrier of Erie, W. S. Brainard of Toledo, W. A. Livingstone of Detroit, Thomas Cranage of Bay City, D. T. Helm of Chicago, William Gerlach of Cleveland, John Mitchell of Cleveland and James A. Calbick of Chicago. This committee's report, which was unanimously adopted, contained the following list of vice-presidents, members of board of managers and standing committees:

Vice-Presidents—J. G. Keith of Chicago; H. Coulby, Cleveland; L. C. Waldo, Detroit; C. A. Brunn, Buffalo; A. B. Wolvin, Duluth; C. A. Eddy, Bay City; L. S. Sullivan, Toledo; M. J. Cummings, Oswego; James McBrier, Erie; F. W. Fletcher, Alpena; W. E. Fitzgerald, Milwaukee; Edward P. Hines, Chicago; W. A. Rogers, Tonawanda; L. M. Bowers, Cleveland. The president and first vice-president will be ex-officio members of the three standing committees.

Board of Managers—E. Gaskin, Peter P. Miller, E. T. Evans, G. L. Douglas, J. J. H. Brown, John Kelderhouse, W. H. Gratwick, Jr., M. M. Drake, Edward Smith, W. C. Farrington, C. H. Donaldson, C. A. Brunn, G. W. Maytham and L. H. Van Allen of Buffalo; Thomas Wilson, M. A. Bradley, James Corrigan, H. M. Hanna, George P. McKay, H. G. Dalton, Harvey H. Brown, John W. Moore, John Corrigan, William Gerlach, Henry A. Hawgood, W. C. Richardson, J. C. Gilchrist, W. D. Rees, John Mitchell, R. R. Rhodes, Caleb E. Gowan, L. M. Bowers, W. H. Becker, W. A. Hawgood, W. H. Mack, C. E. Benham, H. Coulby, J. H. Sheadle, W. G. Mather, E. S. Mills, J. A. McGean, T. F. Newman, W. W. Brown, Cleveland; James W. Millen, William Livingstone, Jr., David Carter, D. C. Whitney, W. A. Livingstone, A. A. Parker, L. C. Waldo, Alexander McVittie, J. W. Westcott and Thomas Adams of Detroit; D. T. Helm, Jesse Spaulding, J. S. Dunham, John G. Keith, Joseph Austrian, C. W. Elphicke, Wiley M. Eagan, J. J. Rardon, James H. Calbick and Geo. J. Harris of Chicago; W. S. Brainard, A. W. Colton and L. S. Sullivan of Toledo; Charles A. Eddy, O. W. Blodgett, B. Boutell, Thomas Cranage, Howard L. Shaw and J. W. McGraw of West Bay City; Alexander McDougall, F. N. LaSalle, G. H. Tomlinson, J. T. Rose and A. B. Wolvin of Duluth; David Vance, H. J. Pauly, W. H. Wolf, W. H. Meyer, Albert Gibbs and W. E. Fitzgerald of Milwaukee; James McBrier of Erie; F. W. Gilchrist of Alpena; C. T. Morley of Marine City; R. E. Schuck of Sandusky, and G. E. Tener of Fairport.

Executive committee—James Corrigan, H. A. Hawgood, Thomas Wilson, M. A. Bradley, L. M. Bowers, W. C. Richardson, J. C. Gilchrist, R. R. Rhodes, H. Coulby, J. H. Sheadle, John Mitchell, Edwin S. Mills, John W. Moore and William Gerlach of Cleveland; J. W. Westcott, L. C. Waldo and James Millen of Detroit; M. M. Drake and J. J. H. Brown of Buffalo; W. H. Meyer and David Vance of Milwaukee; J. S. Dunham, J. A. Calbick and C. W. Elphicke of Chicago; and A. B. Wolvin of Duluth.

Committee on aids to navigation—George P. McKay, W. H. Becker, John A. McGean, W. A. Hawgood, Edward Morton and C. E. Benham of Cleveland; J. G. Keith and W. M. Eagan of Chicago; W. A. Livingstone of Detroit; A. W. Colton of Toledo; Howard L. Shaw of West Bay City; M. M. Drake of Buffalo; W. W. Smith of Sault Ste. Marie; C. T. Morley of Marine City; and W. E. Fitzgerald of Milwaukee.

Committee on Legislation—G. L. Douglas, E. T. Evans, P. P. Miller, M. M. Drake, C. A. Brunn, L. H. Van Allen, G. W. Maytham, C. H. Donaldson, J. J. McWilliams and J. J. H. Brown of Buffalo; L. C. Hanna and James Corrigan of Cleveland; William Livingstone of Detroit; C. A. Eddy of West Bay City; Alexander McDougall of Duluth; Dennis Sullivan and D. T. Helm of Chicago and F. L. Vance of Milwaukee.

INCREASE IN TONNAGE DUES.

The question of tonnage dues was brought up by Mr. A. B. Wolvin of Duluth, who suggested that inasmuch as the association was in need of a greater income the dues for the ensuing year be fixed at 2½ cents for all vessels up to and including 1,400 tons and at 3½ cents for all vessels of greater tonnage, being an increase of ½ cent in each instance. In answer to a question from Capt. M. M. Drake of Buffalo the explanation was made that not only has the association liabilities amounting to $400, but no payment has been made for the services of the grain inspector at the port of Buffalo during the season of 1899. The rates proposed by Mr. Wolvin were adopted.

Mr. Coulby outlined briefly the result of a conference on the part of Cleveland vessel owners with Chairman T. E. Burton of the rivers and harbors committee of the house of representatives, regarding Sault river improvements, adding that the outcome was not entirely such as they would desire and closed with a motion that a committee be appointed to call upon Col. J. G. Lydecker, United States engineer at Detroit, and ascertain just what steps the government had taken or would take this year to guard against a repetition of the disastrous blockades in the "Soo" river. The motion was carried and the committee was appointed as follows: Capt. Geo. P. McKay and Capt. Thos. Wilson of Cleveland, David Vance, of Milwaukee, Alex. McVittie of Detroit, H. Coulby of Cleveland and J. W. Westcott of Detroit.

Attention was called to the fact that there had evidently been different interpretations of the revisions in the rules for "Soo" river navigation, made at a conference held at the time of the last annual meeting. The particular point of misunderstanding was seemingly that many navigators had interpreted the rules to mean that both up and down bound boats could pass each other between the canal and Topsail island, whereas it was desired to limit this privilege to upbound boats only. It was also desired, it was explained, to so revise the rules that boats going in the same direction should not pass between Ballard's Reef and the Lime Kiln crossing. On motion it was decided to appoint a committee to confer on these points with Capt. A. B. Davis of the United States revenue cutter service, and James Millen of Detroit, W. C. Richardson of Cleveland, John McGean of Cleveland, C. E. Benham of Cleveland, Henry Leisk of Milwaukee and John Green of Buffalo were appointed members of the committee. The committee was also instructed to call into consultation any practical navigators whose experience might enable them to give advice.

THE GRAIN SHOVELING CONTRACT.

The final matter for consideration at the session was the grain shoveling contract and a brief debate preceded the determination of whether or not this should be left to a special committee. It was finally decided in the affirmative and the following were selected: L. C. Waldo of Detroit, Edward Smith, M. M. Drake and C. A. Brunn of Buffalo, A. B. Wolvin of Duluth, A. W. Colton of Toledo, James Corrigan of Cleveland, D. Sullivan of Chicago, W. E. Fitzgerald of Milwaukee, Thomas Cranage of Bay City and Howard Shaw of Detroit.

When the second day's session was called to order Thursday afternoon, Jan. 18, with Mr. Farrington, the newly elected president, in the chair, the grain-shoveling committee was ready to report, but resolutions on the death of members who died during the past year were first submitted. Mr. Farrington in taking the chair said: "I want to thank you most heartily for the honor which you have conferred. I will do my best to merit your approval and shall endeavor to fill the office to the best of my ability." Resolutions of regret were adopted upon the announcement of the death of R. H. Hebard of Buffalo, R. P. Fitzgerald of Milwaukee, John F. Eddy of Bay City, and Capt. James McKenzie of Buffalo, each of whom was at the time of decease a member of the association. Another resolution endorsed the bill now before congress providing for the reorganization of the weather bureau. This matter was dealt with very fully in the last issue of the Review. The meeting went into executive session for the consideration of the report of the special committee appointed to consider the award of the grain-shoveling contract, which was in effect that while all the various bids had been received and considered, and all parties desiring to be heard had been heard, more extended time would be necessary for the determination of the relative merits of the various propositions. The committee suggested therefore that they be continued in power and be authorized to act for the general body, and this, after a brief discussion, was acceded to.

Another matter in the executive session was the appointment of a committee to deal with an unpaid balance of some $4,000 on account of the ice blockade at the month of the Detroit river in the fall of 1898. Certain vessel owners who were expected to share in this expense did not do so for one cause and another, most of them claiming that they derived no benefit from the ferry boats and tugs that were engaged in breaking the blockade. Now it is proposed to investigate the claims of these owners in this regard and if they are to be released then it will be necessary to go back to the owners who were benefited for another pro rata assessment.

It was also decided in the executive session to pay Inspector Donovan, who was employed in connection with the settlement of the Buffalo strike, $1,650 for his services during the past season.

IMPORTANT CHANNEL IMPROVEMENTS.

One of the first matters which claimed attention after open session was resumed was the report of the special committee appointed to confer with Col. Lydecker on the subject of important channel improvements in the connecting rivers. The report of the committee was as follows: "The committee appointed by this body to call upon Col. Lydecker to ascertain from him the condition of improvements of the waterways connecting the great lakes has to report that they called upon Col. Lydecker this morning, Jan. 18, and found that he was thoroughly in accord with the suggested improvements proposed by the committee, namely, that owing to the ever present danger of a blockade of the artificial channels through disaster, such as those experienced during the past season in the case of the Douglas Houghton grounding at the Encampment, the North Star-Siemens collision at the head of Little Rapids cut, and the schooner Fritz grounding in St. Clair canal, the government be petitioned to, as quickly as possible and wherever practicable, provide two separate channels and to that end your committee would recommend to the honorable body that it shall use all of its influence to have the government provide an additional channel through the West Neebish, St. Mary's river, in accordance with drawings and surveys exhibited to the committee by Col. Lydecker. In the event of the work being started at once it would, in the judgment of the United States engineers, take five or six years to complete the work, and to take care of the rapidly increasing commerce of the great lakes during that period of time, your committee would also recommend that the government be asked to at once do the necessary work toward sweeping and lighting the old channel from Sailors' Encampment through Lake George to Topsail island, so as to give, as soon as possible, a navigable channel for boats of light draught, and which, in the event of the blockade of the present so-called 20-foot channel, could be used by vessels of light draught (16 to 17 feet). During the interview with Col. Lydecker, discussion turned upon the construction of the power canal at Sault Ste. Marie and its probable effect upon the present navigable channels, and your committee would respectfully suggest that this matter be laid before the proper government authorities and that they be requested to appoint a commission to thoroughly investigate and report back to the secretary of war their findings with their recommendation of what should be done to protect the artificial vessel channels from injury by the construction of this new canal. Your committee found that Col. Lydecker was also in favor of an additional channel through the St. Clair Flats, in preference to widening the present channel, which would entail the removal of one of the present piers; also that the present channel from Ballard's reef through Lime-Kiln crossing be widened to 800 feet."

CHANGES IN SAULT RIVER RULES.

As a result of the two serious accidents that occurred in the Sault river during the past season, and as a result also of the experience of the government patrol service, it was expected that the committee appointed to consider Sault river navigation rules would recommend some changes. Capt. A. B. Davis of the revenue cutter service advised with the committee and the counsel of several well-known vessel masters was also sought in the matter. The committee did not recommend radical changes, but rather such modifications as will apply to small boats and to parts of the river most difficult of navigation where the rules have been a little lacking in the past. The full report of the committee, which was adopted, and which will be submitted at once to the secretary of the treasury, is as follows:

Change second part of Rule 1 so as to read as follows: "Vessels of 500 gross tons or less are exempt from this rule."

Change Rule 3 so that it will read as follows: "All vessels bound up the St. Mary's river may pass other vessels moving in the same direction between the crib light in the northern part of Mud lake and Everen's point in Little Mud lake; between the northern part of the 'Dark Hole' and the south red buoy at Stribbling point; also between the crib light-house at the northern entrance of Little rapids or Island cut and the government pier at Sault Ste. Marie, and between Big point and the light-house at Point au Pins. Vessels bound down the river shall not pass other vessels moving in the same direction below the Spry dock at Sault Ste. Marie until Everen's point is passed excepting, however, in Hay lake.

"Vessels bound down, when of less than 500 gross tons, and without tows, may pass other vessels moving in the same direction in Little Mud lake, provided the overtaking vessel shall pass to the westward of the black buoys and before reaching the 'Dark Hole.' Whenever at Johnston point, Sailors' Encampment, a red ball is displayed, or two red lights are displayed under a white light, indicating that a steamer with a tow is bound down, no steamer with a tow bound up below Johnston's point shall meet or pass the tow bound down until the tow bound up has passed clear of Johnston's point.

"No steamer steaming the current through the Dyke and Island cut shall be allowed to tow more than one vessel without the aid of a tug, unless such steamer has the power to move the tow over the ground at the rate of at least 3 miles an hour."

Add the following rule to be known as Rule 17: "Whenever vessels are compelled, by reason of an obstruction in any of the channels of the St. Mary's river, to collect in certain parts of the river, the revenue cutter officer in charge shall direct where such vessels shall be moored and anchored, and no vessel moored or anchored by reason of such obstruction shall move until directed by the revenue cutter officer in charge."

The committee, realizing that the revenue cutter Morrill is not a vessel suited to this service, also submitted a recommendation in favor of the construction of a new revenue cutter for the river, to cost about $50,000. This recommendation will accompany a bill to be submitted shortly to congress.

MISCELLANEOUS MATTERS.

Mr. H. Coulby called attention to a question often debated—the necessity of keeping lights at various points burning as long as vessels remain in commission—and recommended the appointment of a committee to take this matter up with the light-house board. The following were appointed members: J. C. Gilchrist of Cleveland, Capt. Albert Gibbs of Milwaukee, Capt. John Corrigan of Cleveland, L. H. Van Allen of Buffalo, W. A. Hawgood of Cleveland, W. H. Mack of Cleveland and T. F. Newman of Cleveland. There was unanimous adoption of a resolution presented by Capt. M. M. Drake of Buffalo, expressing the hope that the contemplated Erie canal improvements will be decided upon and pushed to completion. Mr. J. H. Shaedle of Cleveland thought no annual convention should be allowed to pass without a protest against any proposition to bridge the Detroit river, and a resolution on that score was drafted and passed. Another resolution, which was adopted without debate, recommends the passage of the bill now before congress to establish an admiralty court at Buffalo.

Mr. Coulby made a few remarks supplemental to the report of the committee appointed to confer with the United States engineer authorities on the matter of connecting channels and stated that Col. Lydecker had expressed himself as in favor of two channels, each 600 feet in width. The present channels have a width in some cases of only 300 feet. The speaker further suggested that in his opinion it would be an excellent thing to appoint a committee to go to Washington at the proper time and push the presentation of this matter before congress in every possible way. He thought the same committee might also give attention while in Washington to the matter of keeping the lights burning, previously referred to, and to the question of the patrol of the "Soo" river. The suggestion was favorably considered and the chair announced that the selection of members of this committee would be made at a later date. A resolution passed later in the afternoon urged that the United States war department permit Col. Lydecker to journey to Washington at the time of the visit of the committee in order that a fuller presentation of the subject might be made.

Norman B. Conger of the weather bureau talked interestingly of the work of the service and outlined some prospective improvements. A resolution of commendation for the work of the carriers connected with the marine post office at Detroit was unanimously adopted, as were also resolutions of thanks to the proprietors of the Hotel Cadillac, the press, the telegraph companies and the local committee. Mr. W. A. Livingstone of Detroit called attention to the neglect of the project started by the association several years ago for the erection of a memorial to Col. O. M. Poe, and it was decided that an earnest effort would be made during the next few months to raise the amount necessary by subscription.

MEMBERS AND OTHERS IN ATTENDANCE.

Cleveland—Thomas Wilson, James Corrigan, John Corrigan, Geo. P. McKay, Harvey D. Goulder, M. A. Bradley, John A. McGean, H. Coulby, Edwin S. Mills, E. C. Collins, James C. Wallace, Charles L. Hutchinson, W. A. McGean, Wm. H. Mack, E. M. Richardson, H. S. Odbert, Arthur H. Hawgood, John Mitchell, Alfred Mitchell, John Wedow, W. R. Bartlett, F. W. Jackson, A. R. Rumsey, Geo. L. Quayle, Martin Mullen, W. W. Brown, W. B. Davock, John N. Coffin, Wm. Gerlach, N. B. Nelson, Capt. Chas. Frank, Mark Hanlon, F. S. Masten, E. M. Carlton, T. F. Newman, Geo. W. Gardner, C. R. Jones, W. A. Collier, N. J. Boylan, John A. Donaldson, F. D. Herriman, Capt. John Leonard, A. W. Thomson, Oliver Upson, Martin Conners, W. E. Chapman, John W. Moore, James Leitch, C. E. Benham, J. D. Gilchrist, J. A. Gilchrist, J. C. Gilchrist, W. A. Hawgood, Thos. R. Teare, J. H. Sheadle, Duncan Frazer, Robt. Logan, Herman Kelley, Esq., O. C. Pinney.

Buffalo—J. J. H. Brown, C. H. Keep, Edward Smith, James Ash, W. J. Conners, James Kennedy, Edward Gaskin, Junius S. Smith, J. B. Hall, John Johnson, W. S. Grattan, M. M. Drake, G. W. Maytham, Chas. Maytham, E. C. Maytham, Geo. E. Lattimer, John M. Hull, John Green, Harvey L. Brown, F. A. Meyer, A. J. Boland, C. Lee Abel, J. L. Crosthwaite, Stewart Murray, John J. Boland, R. E. Rispin, L. P. Goodale, E. F. Thorpe, C. S. Ferrey, W. C. Farrington.

Chicago—Geo. L. McCurdy, Wm. L. Brown, W. A. Prime, J. G. Keith, D. Sullivan, E. J. Henry, T. T. Morford, D. T. Helm, Daniel E. Lynn, C. H. Sinclair, E. J. Fleming, L. Windemuller, S. R. Chamberlain, A. E. Schuyler, H. A. Foss, Thos. J. Prindeville, J. A. Calbick, Geo. Tebo, E. P. Lenehan, Capt. Walter Hamilton, Homer H. Peters, Geo. F. Lynn, G. J. Harris, H. B. Earhart, W. I. Babcock, J. J. Rardon, J. T. Connery, Chas. W. Eagan.

Milwaukee—T. W. Sheriffs, W. C. Starke, W. E. Fitzgerald, David Vance, Capt. A. B. Davis of the United States revenue cutter service, H. Leisk, Carl C. Joys, Wm. Myers, Albert Gibbs.

Bay City—W. C. Penoyer, Thomas Cranage, S. P. Cranage, J. W. McGraw, C. C. Stewart, Theo. F. Heine, A. Steel, Capt. Forbes, T. F. Madden, W. H. Thorpe, James Reid, Ben Boutell, Walter Young.

Port Huron—J. J. Lynn, J. H. Fitzgerald, E. L. Hendricks, E. D. Eagan, Wm. Hutchinson, David Hutchinson, Frank Danger, A. B. Carpenter.

Duluth—A. B. Wolvin, Alex. Sinclair, J. L. Trempe, C. O. Flynn, Chas. Weeks, W. H. Singer, Alex McDougall.

Marine City—C. T. Morley, John Jenkins, Wm. Smith, W. B. Morley, Alex Anderson, Capt. Scott.

Saginaw—J. T. Garry, Capt. Daniel Ryan, Capt. Geo. Ryan, A. C. McLean.

St. Clair—Simon Langell, Richard O'Connor, Capt. McQueen, Capt. McGregor.

Toledo—W S. Brainard, Geo. L. Craig, L. S. Sullivan, J. P. Nagle.

Various ports—H. L. Holden, Two Harbors; Wm. H. Rolles, Romeo, Mich.; W. J. Symons, Fairport, O.; James McBrier, Erie, Pa.; Ed. S. Henry, Thos. A. Cheney, E. H. Burrill, Ashtabula, O.; C. B. Galton and F. D. Galton, Algonac, Mich.; Capt. Frank Hackett, John Mullen, Capt. Andrew Hackett, Amherstburg, Ont.; A. W. Colton, Toledo, O.; W. W. Smith, Sault Ste. Marie, Mich.; R. E. Shuck, Sandusky; M. Schrank, Ashland, Wis.

REPORT OF MANAGERS.

A Full Summary of Affairs of the Association During the Past Year Submitted by Secretary C. H. Keep—Recommendations of the Executive Officers.

OFFICE OF THE LAKE CARRIERS' ASSOCIATION,
BUFFALO, N. Y., January 16, 1900.

To the Members of the Lake Carriers' Association:—

The board of managers of the association submits herewith its annual report of the proceedings and operations of the association during the past year.

The year just closing has shown a very gratifying increase in the tonnage of the association. The total tonnage enrolled on the books was 760,866, an increase of 75,000 tons over the tonnage of the preceding year. The following shows the comparative tonnage of the association for a series of years beginning 1894: 1894, 590,000 tons; 1895, 618,000 tons; 1896, 722,863 tons; 1897, 687,237 tons; 1898, 686,014 tons; 1899, 760,866 tons.

The tonnage for 1899 is about 40,000 tons greater than in 1896, heretofore the best year in the history of the association. It should be remembered that the increase of 75,000 tons which 1899 shows over 1898, was obtained without a large increase of tonnage on the great lakes. At the end of 1898 a large fleet of vessels was sent from the lakes to the Atlantic coast. The new tonnage coming out during the season of 1899 was not so large as in some previous years and some of it came out so late in the season that it will not appear on our rolls until next spring. The handsome increase is all the more pleasing because it has been obtained by inducing tonnage to join the association which has not heretofore been connected with it. The large fleets of James Davidson and the Ogdensburg Transit Company, both of which were members of the association in 1896, have not been members of the association during the present year. Otherwise the tonnage would have shown a still more gratifying increase.

An analysis of the tonnage figures for 1899 shows that of a total tonnage of 760,866 tons, 596,016 tons were made up of vessels of over 1,200 tons, paying tonnage dues of 3 cents per ton, and 164,850 tons were comprised of vessels less than 1,200 tons, paying tonnage dues of 2 cents per ton. The increase in tonnage of 1899 over 1898 is made up almost entirely of the larger vessels, the tonnage of the smaller vessels for 1898 and 1899 being as follows: 1898, 163,562 tons; 1899, 164,850 tons. It is a gratifying fact that the association has been able to maintain its tonnage of small vessels in 1899 in spite of the large number of this class of boats which left the lakes in the fall of 1898. It is a well known fact that these boats which were being sent to the coast in 1898 were largely smaller vessels belonging to fleets which contained a considerable number of large vessels. This fact is reflected in the tonnage figures. In 1898 only 58,359 tons of the association's tonnage was comprised of fleets entirely composed of small vessels. In 1899, 77,678 tons was comprised of fleets composed exclusively of small vessels. In other words, the loss of the small vessels belonging to large fleets, which were sent to the coast in the fall of 1898, has been made up by inducing numerous individual owners of small vessels to put their boats in the association for the first time.

FINANCES OF THE ASSOCIATION.

The treasurer's report will be submitted to you, showing the receipts and expenditures of the association during the past twelve months. Although it will not show that the association is entirely free from debt, it is the most gratifying statement that the treasurer has been able to make for several years. The total amount of dues that have been collected this season is $21,582.92, showing an increase of $3,883.79 over last year. At the time of the last annual meeting there were unpaid liabili-

ties of $3,348.43, and there were uncollected dues amounting to nearly $1,000. In other words, at the time of the last annual meeting, the treasurer's report showed a deficit of about $2,500. At the present time the total unpaid liabilities which the treasurer reports is only $400.00. The dues have been more successfully and promptly collected this season than ever before in the history of the association. There are no dues remaining unpaid. The association has, during the past year, very nearly cleared up the debt which has been standing against it and carried over from year to year since the large expenditures connected with the Detroit bridge matter in 1896.

The treasurer's report shows that the association has been subjected to a very large extra expense during the past year on account of the shoveling strike at Buffalo. To meet these expenses the executive committee of the association voted that the sum of 3 cents per thousand bushels should be aded to the price for shoveling grain at Buffalo and Erie, the extra 3 cents per thousand bushels to be paid over to the treasurer of the Lake Carriers' Association to defray the expenses of the association in connection with the shoveling strike. The treasurer's report shows collections amounting to over $3,500 from this source, and while the very high freights which have prevailed on the lakes during the past season have tended to decrease the amount of grain carried in competition with the rail lines, so that the revenue from this source is not quite so large as expected, nevertheless it has been of material assistance in enabling the treasurer to make a more satisfactory financial statement than for several years past. The extra charge of 3 cents per thousand bushels collected from vessels on grain carried to Buffalo was asked from owners only as a temporary emergency measure. It seemed the most equitable way of meeting a special need. The large expense incurred by the association at Buffalo was for the benefit of vessels engaged in carrying grain, and the 3 cents per thousand bushels was paid only by vessels engaged in that trade and exactly in proportion to the amount of grain which they carried. The association cannot, however, expect to ask special payments from vessels engaged in special trades on the lakes except under very extraordinary circumstances, and the vessels in the grain trade deserve the thanks of the association for the willingness with which they have accepted the suggestion of the executive committee and paid the special tax imposed upon them.

OPERATIONS OF THE SHIPPING OFFICES.

Shipping offices have been maintained by the association during the past year at Cleveland, Chicago, South Chicago, Buffalo, Ashtabula, Toledo and Milwaukee. A condensed report, taken from the annual report of Chief Shipping Master Rumsey, shows the number of men shipped through the various offices during the past season in comparison with former years, as follows: 1899, 16,681 men; 1898, 16,508 men; 1897, 13,139 men; 1896, 11,838 men. The following table shows the number of men shipped through each office in 1899 as compared with 1898:

Offices.	Year.	No. of Men.	Year.	No. of Men
Cleveland	1899	3,886	1898	3,799
Chicago	1899	3,195	1898	2,911
South Chicago	1899	1,981	1898	1,914
Buffalo	1899	2,117	1898	2,003
Ashtabula	1899	2,400	1898	2,358
Toledo	1899	1,298	1898	1,112
Milwaukee	1899	1,804	1898	1,718

The total expense of maintaining the shipping offices during the past season was $10,648.07, about 42½ per cent. of the total expenses of the association. The cost to the association during the past year for each man put on board of vessels by the shipping offices was about 64 cents, as compared with 65 cents in 1898.

GRAIN BILL OF LADING MATTER.

The committee appointed at the last annual meeting to consider the desirability of effecting some change in the grain bill of lading was composed of L. C. Waldo, chairman; H. Coulby, J. J. H. Brown, A. W. Colton, Dennis Sullivan, David Vance and A. B. Wolvin. This committee made a report in executive session at the last annual meeting, in which they proposed the following amendments to the grain bill of lading:

First—Vessel not to be liable for shortage in excess of one-half bushel per thousand, but not to receive overage; vessel to collect freight on actual out-turn.

Second—the consignee to furnish elevator to begin unloading within twenty-four hours after report of arrival, or pay demurrage at the rate of one-twelfth of the freight less unloading charge, for each twenty-four hours delay.

Third—Delivery to the party to whose care consigned to be good delivery, exempting the vessel from further liability.

Fourth—Shipper to furnish an elevator to commence loading within twenty-four hours after report of arrival, or pay demurrage thereafter equal to one-twelfth of the freight less loading charge, for each twenty-four hours or part thereof.

It was felt that the vessels were entitled to some relief from the serious delays which they had suffered in waiting for elevators to load or unload grain, and that the shortage clause to which vessels have been subject on the lakes was a hardship not generally borne by other carriers, either by rail or water, and therefore not one to which lake vessels ought to be subject. The proposed changes in the grain bill of lading aroused, as might be expected, strong interest and strong opposition from other parties interested in the grain trade. The changes proposed were quite radical and interfered with trade customs which had grown up. It was argued also by exporters that they introduced uncertainty into the expense of moving grain by lake, which would interfere with the close figuring on exporting business which they considered necessary to hold the business for the lake route. After the committee on grain bill of lading reported to the annual meeting, the members voted to continue the committee with power to consult and confer with the other interests involved and agree upon a new grain bill of lading, to go into operation at the opening of navigation in 1899. After the adjournment of the annual meeting, the committee proceeded carefully to collect all the facts relating to the amounts of shortages and overruns, the extent of delay to which vessels have been subject, and the causes thereof, and in general to propare themselves to argue their case at a conference to be held of all interests. Such conference was finally arranged and held in Buffalo on March 7, 8 and 9, 1899. At this conference the following parties were represented; Lake Carriers' Association, by its executive committee and committee on grain bill of lading; Western shippers by delegations from the Duluth Board of Trade, Chicago Board of Trade and Toledo Produce Exchange; the grain exporters and merchants by strong delegations from New York Produce Exchange, Philadelphia Commercial Exchange, Buffalo Merchants' Exchange; Buffalo elevator owners; trunk lines by their general traffic managers or other authorized representatives. Each section of the report of the bill of lading committee was taken up and discussed at great length. At the close of the discussion the matter was referred to a committee of sixteen, containing representatives of all the different interests connected with the grain trade. After nearly two days consideration, this committee submitted its report, which report with its recommendations was adopted by the general conference.

The Buffalo conference early developed the fact that both trunk lines and grain merchants very strenuously objected to the changes proposed at the annual meeting of the Lake Carriers' Association. It was also made clear that they fully realized the hardship which vessels had suffered under the practice that had prevailed in former years, and it was agreed all around that the lake carriers were entitled to redress, but that it should be sought in a manner least objectionable to the other interests. One obstacle in the way of better service at Buffalo appeared to be a lack of cooperation between the elevators at that port. There had been no elevator association in Buffalo in the year 1898, and the delay in unloading of cargoes had been much increased from that cause. The Buffalo conference at one time adjourned to permit a meeting of the elevator owners of that city, and at that meeting the preliminary steps were taken to reform the Western Elevating Association, which has been in operation during the year 1899.

FINAL ACTION OF THE BUFFALO CONFERENCE.

The final action of the Buffalo conference was as follows:

That the Buffalo trunk lines be allowed ten days from the adjournment of the conference to determine what could be done to obtain the elevator facilities at the port of Buffalo for the lake vessels, and that in the meantime the Lake Carriers' Association should suspend action upon its proposed demurrage clause; that a system of arbitration be provided for cases of special hardship to vessels from delays and shortages; that a proper clause be inserted in the grain bill of lading releasing vessels from liability when they have delivered "order" cargoes to the party in whose care they were consigned and taken an agreed form of receipt; that all grain should be consigned to an individual consignee and not to an elevator or a railroad company. Pending action by the trunk lines on these recommendations, the Buffalo conference adjourned. Subsequently the Buffalo elevators having rail connections and doing nearly all the business at that port reestablished an association, and each trunk line designated a considerable group of elevators at which their grain might be delivered in Buffalo. The Western Elevating Association appointed a committee of three, known as the committee of control, whose special duty it was to provide good dispatch in unloading grain vessels at the port of Buffalo, and to secure as far as possible the full facilities of the port to vessels arriving there with grain cargoes. The trunk lines and grain merchants expressed a wish that this system be given a season's trial before the prevailing practices in the grain trade be changed by changes in the bill of lading. Under these circumstances, the executive and bill of lading committee of the association met at Cleveland on April 11, 1899, and practically accepted the offer of the trunk lines and grain merchants. The action agreed upon at the Cleveland meeting is as follows:

First—Each vessel owner may, if he so desires, at the time he charters the vessel, provide for an individual consignee at lake destination, and he may stipulate that if his vessel is sent to more than two elevators to load, the extra service shall be without expense to the vessel. It is believed that delays at ports of loading may thus be remedied to a great extent.

Second—The following provision should be included in all lake grain bills of lading: "If the grain covered by this bill of lading is consigned in care of a party at destination of vessel, then, unless the original of this instrument is there presented for cancellation on or before arrival of vessel, delivery to the party in whose care the grain is consigned herein, shall be a good and valid delivery."

Third—The Lake Carriers' Association accepts the offer of the commercial exchanges tendering the services of their respective boards of arbitration without expense to the Lake Carriers' Association, to hear and decide any claims the Lake Carriers' Association may desire so heard and decided, in respect to any exceptional detention for which the lake carrier deems it just that demurrage should be paid by the party or parties responsible for such detention, or in respect to any exceptional grain shortage for which the lake carrier claims he should be relieved from liability.

Fourth—The Lake Carriers' Association will appoint a committee of three of its members, resident in Buffalo, to act in consultation with the committee of control, provided by the Western Elevating Association, in securing prompt dispatch in unloading grain vessels at the port of Buffalo.

Fifth—The grain trade having objected to the shortage clause which the Lake Carriers' Association proposed to insert in the lake grain bill of lading upon the ground that the commercial value of the bill of lading for collateral uses would be impaired, the association has decided not to insist upon the use of the proposed clause, but to allow the existing shortage clause to stand unchanged until the close of the present lake season. The Lake Carriers' Association then hopes to present a definite and reasonable shortage provision, that will not be subject to objection by the grain trade upon the ground of uncertainty in use.

Sixth—No clause providing for the payment of demurrage will be inserted in the lake grain bill of lading this season.

The detention clause proposed at the Buffalo conference as a substi-

tute for the demurrage clause, will be modified in consultation with the counsel of the Lake Carriers' Association, so as to express correctly the practice which it is understood will, by mutual agreement, govern the unloading of grain cargoes at grain delivery ports this season. The secretary of the Lake Carriers' Association will then submit the detention clause, as modified, to each vessel owner for vote as to the advisability of inserting said clause in lake grain bills of lading after a named date.

Seventh—It is understood that the grain trade, rail carriers and elevators will cooperate in every reasonable way to correct abuses in the matter of shortage and detention and to secure dispatch to vessels at ports of loading and unloading.

Subsequently a local committee, consisting of Messrs. Brown, Maytham and Keep, was appointed to represent the association at Buffalo, and to receive complaints of vessel owners where dispatch in unloading grain cargoes was not given, and to take the matter up with the committee of control appointed by the Western Elevating Association. Upon this plan the grain business has been carried on during the past season, and during the greater part of the season very prompt dispatch has been given to vessels at Buffalo. Two courses, however, neither of them connected with any defect in the grain bill of lading, have prevented the new system from having an absolutely fair trial during the season. The first of these was the shoveling strike at Buffalo in the spring, which is referred to in this report hereafter, and the second the extraordinary business offered to railroads of the country and the shortage in rolling stock, in consequence of which the elevators at Buffalo became clogged early in the fall and some delays resulted owing to the inability of the roads to take away the grain as fast as it was received by lake. In the interval between the close of the strike, however, and the clogging of the Buffalo elevators from the cause above mentioned, the service at Buffalo was as good as could possibly be desired. The Buffalo committee of the Lake Carriers' Association found the board of control of the Western Elevating Association at all times ready to act promptly upon complaints, and where there was just cause for dissatisfaction, a prompt remedy was applied. The cooperation of vessel owners was also sought by instituting a system of notice from the agents loading vessels with grain at western ports by which the authorities of the Western Elevating Association were advised in advance of the boats coming to Buffalo with grain, and thus enabled to place them amongst the different elevators in a manner to facilitate dispatch in unloading. No cases of exceptional shortage or demurrage were submitted to the secretary with request for arbitration.

GRAIN SHOVELING AT BUFFALO AND LABOR DIFFICULTIES.

The contract for shoveling grain at Buffalo during the season of 1899 was awarded at the last annual meeting to W. J. Conners of Buffalo. It became apparent before navigation opened that there was to be a labor controversy at Buffalo between the contractor and the shovelers. It is not necessary to recite here the history of the differences of opinion between the contractor and shovelers. It is enough to confine ourselves to the position taken by the Lake Carriers' Association and to recite the part which it took in the troubles at Buffalo during the early part of the season of navigation.

The greater proportion of the grain fleet arrived in Buffalo on the third and fourth of May. The work of unloading the boats proceeded very slowly. At no time was the work of unloading entirely discontinued, but the force of men employed was much smaller than under ordinary circumstances. Whatever form the differences between the contractor and his men had taken in the first instance, soon after the opening of navigation the shovelers took the position that they would not work under the contract system, but that they would return to the system of shoveling grain under boss scoopers at the different elevators, which had prevailed before the contract system was put into effect. Under these circumstances the executive committee of the Lake Carriers' Association, at their meeting in Cleveland on May 3, adopted the following resolution:

"Whereas, The system of grain shoveling in vogue at Buffalo for three seasons past has operated to correct many abuses; has furnished good wages to the men actually doing the work; saved vessels from delays and extortions and been of marked advantage to the grain trade of Buffalo, and for the mutual advantage of the shoveler and the vessel this system should continue; and

"Whereas, A contest has been excited in Buffalo to do away with this system and compel a return to the old system with all the abuses;

"Resolved, That the members of the Lake Carriers' Association have confidence that their contractor, W. J. Conners, is ready and willing to give the men fair treatment and the same wages as last year, and that they stand by Mr. Conners in this contest and insist on the performance of the work under his contract."

On the 5th of May a conference was held at the Iroquois hotel in Buffalo between members of the executive committee of the Lake Carriers' Association and a delegation from Local No. 51, headed by President McMahon. This meeting was practically held under the auspices of the New York State Board of Mediation and Arbitration. Messrs. Goulder, Wilson, Coulby, Corrigan and Brown attended on behalf of the Lake Carriers' Association. The various labor interests in Buffalo were represented by officers, and a number of the elevator men were in attendance. The position of the Lake Carriers' Association was stated by Mr. Goulder to the effect that the association had entered into a contract with Mr. Conners; that he had given them a bond for the faithful performance of the contract, and that the association had determined to stand by its contractor and by the contract system.

On Saturday, May 6, another conference was held at the Iroquois hotel, at which repsesentatives of the Lake Carriers' Association, the State Board of Mediation and Arbitration, representatives of the elevator association and all the various labor organizations of Buffalo were present. At this conference a paper was drawn up and signed by the various interests, proposing a basis of settlement. This basis included the preservation of the contract with Mr. Conners, abolishing the saloon evil, the appointment of an inspector to see that the saloon evil was abolished in fact, the abolition of all dummies from the pay rolls and strict supervision in this regard by the inspector. This proposition, though signed by prominent labor leaders in Buffalo as a basis of settlement, was rejected at a meeting of the shovelers, after which the Lake Carriers' Association, through Mr. Goulder, made a statement showing that they had made earnest efforts to settle the trouble in a manner satisfactory to the scoopers and contractor, and had submitted what they considered a fair proposition to the scoopers, which they had refused to hear. In this statement Mr. Goulder suggested for the first time the name of Bishop Quigley of Buffalo to act as arbitrator. On the 7th of May Bishop Quigley agreed to endeavor to reconcile the contending parties, and on Monday, May 8, a prolonged conference was held at the house of Bishop Quigley, at which were present, in addition to the Bishop, representatives of the Lake Carriers' Association, New York State Board of Mediation, International Longshoremen's Union, Buffalo Local No. 51. Little progress towards an agreement was made at this conference. During several days thereafter conferences were held at the house of Bishop Quigley, and on Saturday, May 13, a basis of agreement was arrived at and put in writing, and signed by Mr. Goulder for the Lake Carriers' Association, and the attorney for the shovelers. The basis of settlement agreed upon was as follows:

BASIS OF SETTLEMENT.

First—That the price of $1.85 per thousand bushels should be paid to the men actually doing the work of shoveling, with not exceeding one foreman at each elevator leg; no other person to participate therein.

Second—Each gang to select a time keeper from its own number.

Third—The time keeper and inspector provided for at the conference to have free access to bills of lading and other documents showing the quantity of grain elevated.

Fourth—Wages to be paid at elevator offices.

Fifth—No bar bill or other accounts to be deducted from wages.

Sixth—No boss or pay master to be directly or indirectly connected with any saloon.

Seventh—An inspector to be appointed by the bishop to see that the provisions of the agreement where carried out, and to report any violation to the bishop and to the Lake Carriers' Association; the inspector to be removable by the bishop with power to appoint another, if necessary, to be paid by the Lake Carriers' Association.

Eighth—Bishop Quigley to have power to appoint a disinterested arbitrator to hear and finally determine complaints.

Although this agreement was entered into by all parties to the controversy, upon the following Monday morning the scoopers did not return to work as expected, alleging acts on the part of the contractor inconsistent with the agreement. Representatives of the Lake Carriers' Association therefore gave out a statement that they had entered into an agreement which provided a remedy for every abuse and evil that had been complained of by the men; that they had done all they possibly could to put an end to the labor trouble at Buffalo, and not having been successful in inducing the men to go to work, they could only withdraw from further negotiations, leaving Bishop Quigley to deal with the matter as he saw fit. Meanwhile the steam shovels and a force of two to three hundred men were steadily at work in unloading grain at Buffalo, and giving, under peculiarly difficult circumstances, as good dispatch to vessels as was possible. Meantime also, without participation by representatives of the Lake Carriers' Association, various questions between the contractor and men, such as the selection of bosses, the temporary suspension of objectionable bosses and the employment of men not members of Local 51, had been the subject of negotiations between the contractor and shovelers, and on the 23rd of May the settlement of these questions was so far advanced that the men returned to work at all the elevators. Bishop Quigley appointed Timothy P. Donovan inspector to see that the various terms of agreement which had been arrived at by all parties were faithfully carried out, and to report any complaints of violation of the agreement to Bishop Quigley or his representative.

We have gone into a somewhat detailed recital of the dock difficulties at Buffalo in order to show clearly that the attitude of the Lake Carriers' Association from the start was one of fairness and willingness to redress all grievances which the shovelers properly complained of, and that the representatives of the Lake Carriers' Association worked faithfully at all times for the preservation of the contract system of handling grain and against the return to the boss scooper system which had preceded it.

To meet the large extra expense to which the Lake Carriers' Association was subjected on account of the shoveling troubles, it was decided by the executive committee of the association to request owners carrying grain cargoes to Buffalo and Erie to pay an extra 3 cents per thousand bushels on shoveling, this extra 3 cents to go not to the contractor or to the shovelers, but to the treasury of the Lake Carriers' Association. It was thought that this was the most equitable method of dealing with the large expense in which the association had been involved, as it would distribute the expense amongst all the vessels engaged in carrying grain in exact proportion to the amount of grain carried.

THE SHIPPING BILL BEFORE CONGRESS.

The bill for the encouragement of building up an American merchant marine which is now pending before both houses of congress, has been before the legislative committee of the association during the year. In January last a joint meeting of the legislative committee of the Lake Carriers' Association, which has its headquarters in Buffalo, and the board of trustees of the Buffalo Merchants' Exchange, was held, at which Mr. Firth, president of the association, made a careful statement of the provisions of the shipping bill and the reasons why its passage would be beneficial. A resolution was adopted by the legislative committee and sent to Washington favoring the passage of the bill; representatives of the association appeared before the house and senate committees at public hearings on the bill, and the president of the association took quite an active part in framing the modifications and changes which were made in the bill before its reintroduction at the present session of congress.

WATER LEVELS OF THE GREAT LAKES AND PROPOSED INTERNATIONAL COMMISSION TO CONSIDER AND DEAL WITH THE PROBLEM OF THEIR MAINTENANCE.

One of the most interesting and important questions relating to the matter of the lake traffic which has come to the front during the past

twelve months, is the question of a proper method of maintaining the water levels on various lakes. The question is not a new one, but various recent events have served to bring it into great prominence, and it is now for the first time receiving the public attention which its importance deserves. On the 15th of July last President Firth of the association addressed a letter to one of the marine papers of Cleveland, in which he called attention to the various engineering projects either actually undertaken or contemplated along the chain of great lakes, affecting the water levels, and pointed out that a very serious mistake was being made in assuming that comparatively small reductions in the lake levels were of no practical importance. President Firth strongly advocated that the vessel interests which were particularly interested in maintaining and if possible increasing the lake levels, should advocate and obtain the appointment of an international commission of United States and Canadian engineers, whose duty it should be to investigate carefully the entire question, recommending to their respective governments a permanent policy to protect the interest of lake navigators, without needlessly restricting important private enterprises desiring to utilize for power or other purposes the waters of the geat lakes. The attention of President Firth was especially called to this question during the early part of his term of service as president of the association by the power canal project at the Sault. Correspondence between the president of the Lake Carriers' Association and the officers of the Sault Power Canal Co. removed to a large extent the apprehensions that the president had that the project of the canal company might materially affect the water levels in Lake Superior and the upper St. Mary's river. Assurances were given by the power company that they were as much interested in maintaining the present levels in Lake Superior as the vessels, and that their plans called for structures in the unnavigable part of the St. Mary's river, which would compensate fully for the draft of water from Lake Superior through the power canal. A few weeks later it was reported in the public press that a company had been formed with suitable backing, to construct a canal from Lake St. Clair to Lake Erie, and this again raised the question of a possible lowering of the levels of Lake St. Clair and the Detroit river. At the present time the power projects of Niagara seem to have little to do with the maintenance of lake levels as the water is taken away from and returned to the river in unnavigable parts of the stream. The whole question of lake levels has, however, been again brought into prominence by the proposal of the United States Deep Waterways Commission to maintain the level of Lake Erie by the construction of a partial dam at or near the head of the Niagara river, the purpose of this dam being to secure the deepening of the various harbors on Lake Erie and also the deepening of the shallow channels near the mouth of the Detroit river. President Firth's letter to the paper referred to has called forth a large number of replies and has shown a general disposition on the part of students of this question to approve his recommendation that the subject is of such importance that it should be taken up by an international commission. Able engineers, thoroughly acquainted with the whole problem of navigation on the lakes, have approved Mr. Firth's suggestion, the president recommends that the various articles approving this plan should be collected and published in pamphlet form by the association for use in congress and in spreading general information from expert sources on this subject. The Lake Carriers' Association could, in our judgment, do no more useful work than to bring about a scientific consideration of this question and satisfactory solution. It is quite clear that the various departments of the government are fully alive to its importance.

At the request of the Lake Carriers' Association the United States Weather Bureau has this year taken up the duty of carefully collecting the facts relating to the rain fall on the various lake basins, and it has published in tabular form the statistics of rain fall in connection with the various government records kept by the United States war department, of the monthly changes in the water levels of the various lakes. The tabulation of rain fall and water levels will be published with the annual report of the Lake Carriers' Association, and should also be made part of the proposed pamphlet on the subject of lake levels. The annual report of the chief of engineers of the United States army for 1899, clearly shows that that department is alive to the importance of that question. On page 635 of the report, the chief of engineers refers to the question as follows:

"Of still more pressing importance for the time being is an energetic prosecution of the recently inaugurated work of investigating lake levels, the immediate practical purpose of which is to devise the best means of regulating these levels, and of preserving or increasing the navigable depth of natural and improved channels in the lakes and their connecting waters. Operations under this project are now dependent upon small allotments from two pertinent appropriations, but, if any reasonable progress is to be realized, it is essential that means be provided for continuing them on a much more extensive scale; the work is so intimately connected with the lake surveys, past and present, as to induce the suggestion that its further prosecution be in connection with appropriations for these surveys. It will be absolutely impossible to make anything like satisfactory progress in these investigations unless an expenditure of at least $100,000 be provided for during the year ending June 30, 1901. It is therefore recommended that the estimate for surveys for the year 1901 be made to include the amount specified in the foregoing paragraph, and that the appropriation be formulated as follows:

"For survey of northern and northwestern lakes, including all expenses of correcting, extending, and issuing charts, and investigating lake levels, with a view to their regulation, to be available until expended, $150,000."

The matter of this appropriation will doubtless come before the committees of congress during the present session, and the time is therefore opportune for the Lake Carriers' Association to ask congres to make the necessary provision for careful examination of this subject, and at the same time to pave the way for the appointment of the international commission, which can alone deal with the subject in a comprehensive manner.

RE-IMBURSEMENT FOR PRIVATE LIGHTING.

The president of the association, soon after his election, called upon the secretary and treasurer to furnish him with full information as to the disbursements of the association for private lighting for five years past, the information to show the amount of money that the association has paid out for the purpose, the lights which it has maintained, the necessity for the lights, and any re-imbursement that the association has received from the government, from marine insurance intersets or any one else. When this information had been collected the president suggested that in his opinion the association had paid out moneys for lights which it had been the duty of the government to provide, and that the association was fairly entitled to re-imbursement. The information was therefore put in proper form for presentation to the authorities at Washington, and a bill has been introduced in the senate by Senator McMillan of Michigan under which the association can be re-imbursed for its expenditure since the season of 1894.

The lights which the association has been paying for are of two classes; either they are lights which the association has maintained temporarily to light newly constructed channels, built by the United States government, until the light-house board could provide a permanent system for lighting the channels, or they are lights situated in Canada and used to light artificial channels built by our government for our ships, which can only be properly lighted from the Canadian side. It has been assumed that our government was powerless in any manner to provide lights on Canadian soil. Thus the Ballard's reef lights at Ballard's reef, which were maintained in 1896 at an expense of $1,800, belong to the first of the two classes mentioned, and they have since been replaced by government gas buoys. To this class also belong the lights maintained this year in the Sault river, where the government has plans for lighting the various channels lighted by our lights, but it has not yet got the government lights into operation. To the second class belong the lights we have maintained for the whole of the six-year period since 1894 in the vicinity of the Lime Kiln crossing, where the channels are close to the Canadian shore and can only be properly lighted by lights on that shore. The senate bill introduced by Senator McMillan has been referred to the light-house board for report and has been in turn referred by the board to the various district officers of the light-house service on the lakes. Full information from the point of view of the Lake Carriers' Association has been furnished to the district officers and to the light-house board itself. We are very glad to say that in this matter the position taken by the Lake Carriers' Association has the hearty support of Senator McMillan. In a letter dated January 6, 1900, addressed to the secretary of the association, Senator McMillan says:

"In my opinion the Lake Carriers' Association should be re-imbursed for all the money which they have necessarily expended, the necessity being settled by the subsequent action of the government in replacing lights which the Lake Carriers' Association has maintained. Also, it seems to me entirely proper that the Lake Carriers' Association should be re-imbursed for lights necessarily maintained in Canadian waters. In short, I agree entirely with your letter, and think the suggestion with regard to contract lights a valuable one. The principle which should govern, of course, is that of making the lake waterways as safe as human ingenuity can make them, in order to accommodate the enormous commerce passing through them.

"I have referred your letter to the light-house board, and have notified the board of my entire concurrenc in the views expressed by you."

The reference to the contract system made by Senator McMillan in his letter is to a suggestion coming originally from one of the district light-house officers, that it does not follow by any means that because the light-house board was powerless to build lights in Canada, it was unable to light the channels built by our government for our ships near the Canadian shore; that while our government cannot acquire sites for lights in Canada and own its lights there, it was possible, in case congress made provision therefor, that the light-house board could contract either with the Lake Carriers' Association or individuals for maintaining the necessary lights on the Canadian shore to light channels constructed by the government. It certainly does not seem right that one department of the United States government should expend millions of dollars on a channel and leave it unlighted, and that another department should not be able to find a way to spend a few thousand dollars in satisfactorily lighting this channel. Now that the problem is before the light-house board we may fairly expect that they will take it up with a determination to reach a satisfactory solution in some way. If it is part of that solution that the Lake Carriers' Association is to be re-imbursed for the money it has paid out for these lights during the past five or six years, your board of managers will have rendered the association very useful service.

BLOCKADES IN THE ST. MARY'S RIVER.

The two blockades in the St. Mary's river during the past season have called especial attention to the difficulties under which the great commerce of that river is now carried on. It is difficult even for our lake vessel owners to realize the rapidity of the growth of the traffic through the St. Mary's river. In 1889 the total vessel tonnage passing through the river was 7,221,935 tons; in 1899 it was 22,000,000 tons. It is but a few years since night navigation in the river was begun, and while the opening of the Hay Lake channel and the improvements at the Encampment have greatly improved navigable conditions, it has been recognized from the start, even by those who had no idea that the growth of commerce would be so rapid, that the channels as they now exist must not be considered final, and that other extensive improvements will be necessary. It is estimated that the first blockade at the Encampment during the past season, although lasting only five days, involved a dead loss to those interested in the navigation of not less than a million dollars. It is even more difficult to estimate the loss of the shorter blockade near the end of the season. While the number of vessels detained was not so great as in the case of the wreck of the Douglass Houghton, the fact that the blockade was so near the close of navigation, made even the short delay involve a loss of a trip to many vessels. The damage would have been very much greater if the weather conditions had been such as to necessitate an early close of the Sault canal, or even the closing at the average date. It is appalling to think of the damage in dollars and cents, not to speak of the disturbance to the industry of the country, that might be caused by a serious and prolonged blockade of the St. Mary's river.

Yet, under the conditions as they exist, such a blockade is not only a possibility, but almost a likely occurrence, and the increase in the size and number of vessels is every year adding to the danger. The whole history of improvement in the St. Mary's river, including the building of the new lock at the Sault, teaches the lesson that work begun by the government at the first warning is not completed any too soon. But for the building of the Canadian lock, the old government lock at the Sault would have been unable to take care of the business until the new lock was opened. Unless the new channels in the Sault river are begun at once, the existing channels will be overtaxed before the new improvements can be completed. The river and harbor act of March 3, 1899, provided for a thorough investigation of the further improvement needed in the St. Mary's river. The secretary of war was authorized to "cause to be made and reported as early as practicable a survey of the connecting waters between Lakes Superior and Huron, including Hay Lake channel, with a plan and estimate of such improvement, as will secure a safe and convenient channel 21 feet deep, between said lakes, the expense of which shall be paid from the appropriation for improving Hay Lake channel." Under this provision it is understood that the engineers in charge of the St. Mary's river are prepared to make their recommendation to congress for further improvements of the channels, and it is also understood that such improvement will take the form of deepening the channel through the West Neebish, thus doing away with the difficulties at the Encampment and providing two channels through the most difficult part of the river, one of which can be used for ascending and the other for descending vessels. It is highly important that the assent of congress to this project should be obtained at the earliest possible moment, and it is therefore deeply disappointing to the executive committee of the association to ascertain that there is a strong probability that no River and Harbor Bill will be passed by congress this session. One of the most important questions to come before the annual meeting will be the consideration of the best method to hasten this improvement, which is by far the most important now under consideration for the lakes.

WATER ROUTES FROM THE LAKES TO THE SEABOARD.

The continued growth of the lake traffic and the growing importance of the export business of the United States, not only in grain but in other products, such as iron and steel produced in the lake regions, has drawn public attention during the past year repeatedly to the various projects now pending for an improved waterway from the great lakes to the sea. The preliminary report of the United States Deep Waterways Commission, with its project for a dam at or near the head of the Niagara river, has already been referred to. In addition to the making of that report, the past year has seen the completion of the St. Lawrence canals and the opening of a 14-foot waterway from Lake Erie to the sea by way of the St. Lawrence river. This has been promptly followed by plans for the development of an extensive grain trade through the St. Lawrence river, and a syndicate, largely composed of men familiar with lake navigation, has been formed to build large terminals at Montreal, and possibly at Port Colborne, with a view to the development of this branch of the business. Meantime two commissions have been at work in the state of New York examining the problem with a view to the best interests of that state. One of these commissions was appointed by the governor to investigate the causes of the diversion of trade from the port of New York. The second commission was appointed by Governor Roosevelt to report to him as to whether the Erie canal should be abandoned or improved, and if improved, what should be the nature of the improvement. The plans for diverting the grain business to Montreal naturally aroused public interest in the state and city of New York in the work of both of these commissions. It is clearly apparent that the state is now more interested in the development of a connecting link between the lakes and the sea than at any time in its history. The report of the canal advisory commission is now in the hands of Governor Roosevelt, and will be made public within a few days. The governor has announced his intention of sending a special message on the subject to the legislature of the state. The commercial organizations throughout the state are taking an active interest in the matter and urging upon the state authorities a comprehensive plan of canal improvement, such as will preserve to the state of New York the commercial supremacy which the Erie canal gave to the state in its early days. It is understood that the advisory canal commission will report against the abandonment of the Erie canal and in favor of improvement. It is also understood that the improvement which they will recommend is far more radical in its nature than any that has been under contemplation by the state in recent years. Briefly, the improvement recommended is believed to provide for a canal with 10 feet draught of water, with locks 25 feet wide, and capable of taking in boats 150 feet in length, with all the single locks lengthened so as to permit two boats of 150 feet length to be locked through at once, and with such enlargement in the prism of the canal as will reasonably accommodate boats of this size. A canal boat 25 feet wide and 150 feet long, drawing 10 feet of water, would carry in the neighborhood of a thousand tons, and a tow of such vessels, consisting of steamer and consorts, would carry 4,000 tons. Such canal boats are cheap to build and cheap to operate, and this fact, together with the advantage of the New York terminals will, it is believed by the commission, enable the state of New York to hold the commerce of the lakes against any competition by railroad or Canadian water route that may arise.

MISCELLANEOUS MATTERS.

During the past year the bill passed by congress permitting vessel owners to file bonds in advance with the marshals of the United States courts which will secure the immediate release of vessels libeled in admiralty, has gone into effect, and rules and regulations to carry out the law have been adopted in the various lake districts. A number of the principal fleets in the association have filed the necessary bonds in the offices of the different districts in which their business is carried on, and are now relieved from fear of detention under the old system by which libels for small and unjust claims were served just as vessels were leaving port. This result is one which the association has had in mind to bring about for several years past, and its final accomplishment is a matter for congratulation among the members.

A committee of the Lake Carriers' Association appeared at Washington before the international commission last spring, made oral argument and filed a written brief in favor of including the abolition of Welland canal tolls among the subjects to be taken up and settled at the international conference. As we all know the conference was unable to reach an agreement on the subject of the Alaskan boundary, and adjourned without making report on any of the subjects which it was called to consider. Since then a temporary agreement on the Alaskan boundary has been arrived at through diplomatic channels, and it is expected that the international conference will again be called together to consider the other questions which were before it. In that event the canal-toll question will unquestionably receive consideration.

The committee on aids to navigation finds the most pressing need in the way of aids to navigation on the great lakes at the present time to be an additional supply of gas buoys for the St. Mary's river, especially for lighting the cuts at the Encampment and at the head of Little Mud lake, where the association is now maintaining private lights in Canada. The principal difficulty in securing additional gas buoys has been the lack of light-house tender facilities on the lakes, and the committee has therefore taken up that matter with Senators Hanna and McMillan in the hope that provision may be made at this session of congress for an additional tender or supply vessel, and that in connection therewith a vessel may be temporarily chartered by the light-house authorities so that the additional gas buoys may be provided and properly cared for before the completion of the new tender. The matter is receiving careful consideration, and the committee on aids to navigation expects, with the assistance of the senators above named, to be successful in its efforts.

Early in the fall the executive committee of the association held a meeting in Cleveland and adopted a resolution requesting the light-house board to leave the aids to navigation in service as long as possible. The exceptional weather conditions that prevailed at the close of the season and the high freights combined to keep boats in commission longer than usual. Most of the necessary lights, however, were kept in operation until the fleet was generally in winter quarters. There were some exceptions to this, however, and some lights were removed when a large number of vessels were still coming down the lakes and when the weather conditions did not appear to necessitate haste in their removal. The question of putting lights out of commission in the fall of the year has long been a troublesome one to deal with, both from the government point of view and the point of view of the vessel owners. All that can be reported in this regard is a gradual improvement, and the general disposition on the part of the officers in charge to do the best in their power to meet the requirements of the vessels.

In an editorial in one of the marine publications June 22nd, 1899, the formation of a Great Lakes Shipwreck and Humane Society was urged for the purpose of recognizing and encouraging acts of personal heroism in efforts to save life or property on the lakes. The president of the association has taken a live interest in this question, and he suggests that the following action be taken by the association:

That local committees at the different lake ports be organized inside the association, whose duty it will be to take notice of and investigate cases of personal heroism occurring in their districts, such sub-committees to report such cases to the secretary of the association, and he in turn to submit them to the committee on legislation for decision as to whether or not application shall be made by the association to the United States life saving service department for the issue of gold or silver medals or bars, such as are granted by the United States government for acts of personal heroism in saving life.

The president also suggests that the committee on legislation should prepare a form of engraved certificate, to be signed and sealed by the officers of the association and given together with the United States medal, presentation to be made in some suitable public way, preferably under the auspices of the sub-committee of the association originating the investigation and reporting the case. It is believed that such public recognition of cases of exceptional merit will encourage to save life and property subject to the hazards of navigation, with benefit to the entire service on the great lakes.

In conclusion the board of managers congratulates the members of the association upon the prosperous condition of the association's affairs, and the generally satisfactory conditions prevailing in the lake carrying business.

It is particularly gratifying to note that the prosperity that has attended the lake trade during the past season, and which promises to continue during the coming season, has been widely distributed, so that the smaller as well as the larger vessels have alike enjoyed it.

Respectively submitted,

BOARD OF MANAGERS.

Frank J. Firth, Pres., Chas H. Keep, Sec'y.

FINANCES OF THE ASSOCIATION.

A Summary of the Annual Report of George P. McKay, Treasurer, for the Year ending Dec. 30, 1899.

The report of Capt. Geo. P. McKay, treasurer, shows receipts aggregating $25,074.00; expenditures, $25,065.94; balance, $8.06. Unpaid liabilities are balances of 1899 salaries due officers as follows; H. D. Goulder, counsel, $150; C. H. Keep, secretary, $150; Geo. P. McKay, treasurer, $100. A summary of the treasurer's report which goes into exhaustive detail. is as follows:

RECEIPTS OF LAKE CARRIERS' ASSOCIATION, 1899.

Balance on hand from 1898, $36.87; tonnage dues for 1898, $592.43; tonnage dues for 1899, $20,990.49; extra 3 cents per thousand bushels of grain shoveled at Erie, $78.08; extra 3 cents on grain shoveled at Buffalo, $3,371.13; refunded by C. H. Keep for overpayment of checks, $5. Total receipts, $25,074.00.

DISBURSEMENTS OF LAKE CARRIERS' ASSOCIATION, 1899.

Salaries of officers: C. H. Keep, secretary, balance of 1898 and on account 1899, $2,550; Geo. P. McKay, treasurer, balance of 1898 and on account 1899, $1,450; H. D. Goulder, attorney, balance of 1898 and on account 1899, $1,750; total, $5,750.

Salaries of shipping masters in full for 1899: A. R. Rumsey, Cleveland, $2,000; Wm. F. Wall, Cleveland, $700; Maynard Fisk, Buffalo, $787.50; Edward Nesbitt, Buffalo $142.50; Dan Harrington, Ashtabula, $680; Patrick Mitchell, Toledo, $600; J. W. Hansen, Chicago, $1,000; Robt. Anderson, Chicago, $640; M. P. Felt, South Chicago, $600; Jesse Raymond, South Chicago, $37.50; Wm. Lennon, Milwaukee, $900; total $8,087.50

Expenses of shipping offices: Cleveland—Office rent, $113.66; office supplies, provisions, telephone, etc., $750.42. Buffalo—Office rent, $200; office supplies, telephone, etc., $108.29. Ashtabula—Office rent, $125; office supplies, etc., $19.25. Toledo—Office rent $125; office supplies, fuel, etc., $6.93. Milwaukee—Office rent, $150; office supplies, fuel, etc., $25.65. Chicago—Office rent, $210.03; office supplies, telephone, etc., $416.77. South Chicago—Office rent, $172.50; telephone, office supplies, etc., $137.07. Total expenses of shipping offices, $2,560.57.

Extraordinary expenses: For maintaining private lights at Lime-Kiln crossing, Amherstburg and at various points in Sault river, $5,334; traveling and other expenses incurred account aids to navigation, Detroit river bridge matter, grain bill of lading, grain shovelers' strike and for reporting stage of water at Detroit, $1,395.11; traveling expenses C. H. Keep, Buffalo to Cleveland and return to attend meetings of executive committee and grain shoveling committee, $25.25; traveling expenses of Chief Shipping Master A. R. Rumsey visiting various shipping offices, $265; total, $7,019.36.

In addition to the foregoing are the following items: Payment of $1,000 note held by Union National Bank of Cleveland, $1.000; interest on $1,000 note held by said bank, $30; incidental expenses, offices of secretary and treasurer, $165.55; printing and telegraphic expense of secretary's and treasurer's office, $452.96. Grand total of disbursements of all kinds, $25,065.94; balance on hand, $8.06.

BANQUET OF LAKE CARRIERS.

The banquet, which was held at the Cadillac hotel on Thursday evening, the 18th, was a very informal affair. The attendance was fairly large and the menu served was excellent. William Livingstone of Detroit acted as toastmaster, and brief addresses were made by Harvey D. Goulder, W. C. Farrington, M. A. Bradley, John C. Shaw, Capt. Dennis Sullivan, Alexander McDougall, Harvey W. Brown, James Corrigan, L. C. Waldo, J. G. Keith, Capt. H. E. Stewart, O. C. Pinney, C. E. Benham, A. B. Wolvin and H. Coulby.

PROGRESS WITH NEW NAVAL VESSELS.

The percentage of work done on new vessels of the United States navy as reported to Chief Constructor Hichborn on the first of the present month, was as follows:

Battleships—Kearsarge at Newport News works, 98 per cent; Kentucky, Newport News works, 97; Illinois, Newport News works, 73; Alabama, Cramp & Sons, 92; Wisconsin, Union Iron Works, 84; Maine, Cramp & Sons, 18; Missouri, Newport News works, 1; Ohio, Union Iron Works, 10.

Sheathed protected cruisers—Albany at Armstrong's, England, 97 per cent; Denver, Neafie & Levy, 0; Des Moines, Fore River Engine Co., 0; Chattanooga, Lewis Nixon, 0; Galveston, Wm. R. Trigg Co., 0; Tacoma, Union Iron Works, 0; Cleveland, Bath Iron Works, 0.

Monitors—Arkansas at Newport News Works, 12 per cent; Connecticut, Bath Iron Works, 35; Florida, Lewis Nixon, 21; Wyoming, Union Iron Works, 32.

Torpedo boat destroyers—Bainbridge at Neafie & Levy works, 38 per cent; Barry, Neafie & Levy works, 38; Chauncey, Neafie & Levy works, 37; Dale, Wm. R. Trigg Co., 53; Decatur, Wm. R. Trigg Co., 52; Hopkins, Harlan & Hollingsworth, 31; Hull, Harlan & Hollingsworth, 31; Lawrence, Fore River Engine Co., 77; Macdonough, Fore River Engine Co., 75; Paul Jones, Union Iron Works, 60; Perry, Union Iron Works, 60; Preble, Union Iron Works, 60; Stewart, Gas Engine & Power Co., 11; Truxton, Maryland Steel Co., 7; Whipple, Maryland Steel Co., 7; Worden, Maryland Steel Co., 7.

Torpedo boats—T. A. M. Craven at Bath Iron Works, 99 per cent; Stringham, Harlan & Hollingsworth, 93; Goldsborough, Wolff & Zwicker, 97; Bailey, Gas Engine & Power Co., 63; Bagley, Bath Iron Works, 4; Barney, Bath Iron Works, 4; Biddle, Bath Iron Works, 4; Blakely, Geo. Lawley & Son, 67; DeLong, Geo. Lawley & Son, 67; Nicholson, Lewis Nixon, 45; O'Brien, Lewis Nixon, 45; Shubrick, Wm. R. Trigg Co., 74; Stockton, Wm. R. Trigg Co., 74; Thornton, Wm. R. Trigg Co., 70; Tingey, Columbian Iron Works, 42; Wilkes, Gas Engine & Power Co., 23.

Submarine torpedo boat—Plunger at Columbian Iron Works, 85 per cent.

Mr. J. E. Whittlesey of the American Stoker Co. was in attendance at the annual meeting of the Lake Carriers' Association, making the acquaintance of vessel men, who have become very much interested in the successful installation of a mechanical stoker of the American company's manufacture on the large freight steamer Pennsylvania. Mr. Whittlesey closed arrangements with Ashley & Dustin of Detroit for the equipment of their fast side-wheel steamer Frank E. Kirby and has negotiations under way for stokers to be applied to the large passenger steamers of the Detroit & Cleveland line. There is, of course, a great field for a mechanical stoker suited to marine service and Mr. Whittlesey is meeting with a very favorable reception from lake vessel owners on account of the success attained on the Pennsylvania with the device which he represents.

CARNEGIE VESSEL INTERESTS.

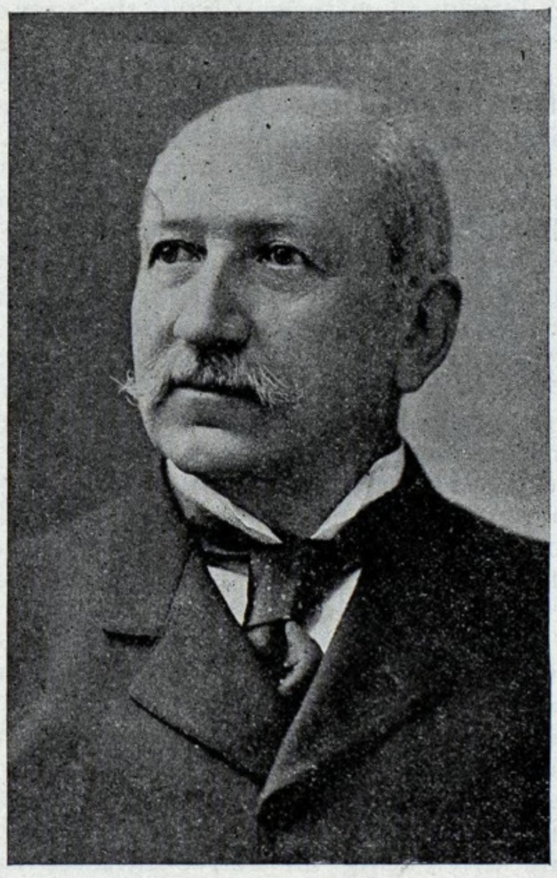
It has been announced within the past few days that recent trials of the ore unloading device on the Carnegie docks at Conneaut, O., have proven so successful that two more of the large machines will be built at once by the Webster, Camp & Lane Machine Co. of Akron, and that the work will be so hurried as to admit of their use in unloading a large part of the ore to be taken into Conneaut by vessels next season. It is said that officials of the Carnegie company have never entertained doubt of the ultimate development of this machine for the purpose for which it was designed, but it was hardly expected in the first experiments that it would so soon be engaged in the actual operation of unloading vessels. The possibilities of this machine as a labor saving device are undoubtedly greater than anything as yet introduced in the handling of freight on the great lakes.

The formal organization of the Pittsburg Steamship Co. brings together all the vessel property of the Carnegie-Oliver interests, the new company taking over the vessels of the Lake Superior Iron Co., the steamer C. A. Black, steamer Lynn and consort Carrington, and the several modern steel freighters now under construction at different works of the American Ship Building Co. Headquarters of the new steamship company will be in Pittsburg, but the office of the general manager, Mr. Edwin S. Mills, will, of course, be in Cleveland, as he is the Cleveland representative of the Carnegie and Oliver companies. Officers of the steamship company are: President, H. W. Oliver; vice-president, James Gayley; secretary, C. D. Fraser; treasurer, H. C. Daft; general manager, Edwin S. Mills.

It is understood that Capt. E. Day of Conneaut, who has been in charge of the Carnegie docks at that port, is to return to Cleveland to take the position of traveling inspector in connection with the vessels and other matters pertaining to the vessel department of the Carnegie offices in Cleveland.

COMMANDER OF THE ALBANY.

A dispatch from the Washington correspondent of the Review says: "Capt. Jos. E. Craig, chief hydrographer, a sketch of whose naval career appeared in the naval edition of the Review, has been ordered to command the cruiser Albany, just completed at Armstrong's, Newcastle, England. He will leave Washington at once for the purpose of bringing the vessel across the Atlantic to New York. A crew of 200 men is now being formed by the navy bureau of navigation for the vessel and will be taken to England in the auxiliary cruiser Prairie."



SUPERVISING STEAMBOAT INSPECTORS.

Washington, D. C., January 18.—The United States Board of Supervising Inspectors of Steam Vessels began its annual meeting in the Lemmon block on Wednesday of this week. The following supervising inspectors were present: John Bermingham, San Francisco; George H. Starbuck, New York; John W. Oast, Norfolk, Va.; Ralph J. Whitledge, St. Louis, Mo.; John D. Sloane, Dubuque, Iowa; Eugene L. Dorsey, Louisville, Ky.; Samuel R. Crumbaugh, Cincinnati; Charles H. Westcott, Detroit; James Stone, Cleveland; John A. Cotter, New Orleans. A number of men interested in various mechanical appliances are also in attendance. The sessions will continue for two weeks. At the opening session James A. Dumont, the supervising inspector general, presented a large number of communications on different subjects pertaining to the rules of the service and to various devices that will be considered by the board. These matters are all referred to committees and it will be several days before the reports of these committees are submitted for final consideration by the general body.

J. G. Keith and others of Chicago now control the steamers Parks Foster and Ira Owen. A few weeks ago these vessels were bought by Mr. A. McVittie, C. B. Calder, J. G. Keith and others for $220,000. Now Mr. McVittie and his associates have sold their interest to J. G. Keith and others on a basis of $260,000 for the vessels.

Capt. Fred. La Salle of Duluth was very much missed at the annual meeting of the Lake Carriers' Association in Detroit. He has been very low with heart trouble at his home in Duluth since returning from a trip to Europe, but his friends still have hopes of his recovery.

NEW YORK STATE AROUSED.

RADICAL MEASURE OF CANAL IMPROVEMENT PROPOSED BY GOVERNOR ROOSEVELT'S ADVISORY COMMITTEE—A WATERWAY FOR BOATS OF 1000 TONS CAPACITY AT A COST OF $60,000,000.

Buffalo, Jan. 16—Canal advocates are feeling decidedly more firm in their position since the big meeting here last week, for it developed strength that was hardly looked for in a gathering that was not at all worked up beforehand. There is a snag just ahead, though, that ought to be taken care of before it is allowed to do any harm to the cause. The snag is the amount that the governor's advisory canal committee will recommend for putting the canal into good commercial condition to enable it to carry grain from Buffalo to New York at a profit for a cent a bushel. The report will be made public any day now, and though nothing of the details have been published yet, it will very probably urge by a big array of figures that $60,000,000 is needed for the work, and it may now be said also that the report is such a radical affair that when it gets through with the canal there is barely half of the original Clinton's ditch left.

For this reason it is proper that some note of warning be given or the timid support of the canal is going to be frightened. Some time ago the committee was so anxious that its recommendations should not be misunderstood that the public was asked unofficially not to pass judgment without reading the entire report. It was felt that such a study of the situation would convince everyone, as it did the committee, that there was but one thing to do. If a solid business and scientific body like the committee, with not a bit of politics or self-interest in its composition, should feel obliged to report in favor of fairly a new canal there is ample reason for the same view of the case by the public.

In the first place there will be in the report a provision for a canal that will float a thousand ton boat in place of the present 250-ton boat, and so much of the existing waterways is to be taken into the route that fully half of the entire distance from Buffalo to New York will be made in free waters. The big cities on the way, like Rochester and Syracuse, will be avoided, because it is found by actual calculation that it is cheaper to build a new canal in such territory than it would be to enlarge the present canal through these cities. Then the plan contemplates for motive power either steam or some other force that may be independent of a tow path, for it takes in Seneca river and Oneida lake, and also the Mohawk from Little Falls eastward.

When the Erie canal was built it was supposed that horse power was to be the only thing available for moving the boats, so an independent line was laid out away from streams for the most part, merely using the Tonawanda a few miles, as it was so sluggish and little subject to overflow that it would carry a towpath about as well as an artificial canal. It is now felt that the days of the horse boat are about over, and the committee has struck out boldly for the best route, regardless of the method of propulsion. In every case where a deviation from the old plan or the old route is asked for, the committee will be able to show by figures that the change is a saving in cost, and as to results there will be nobody to complain, unless it may happen to be the old boatman who still believes that the salvation of the route is possible under the tow path and mule system. It is not denied that there are some of these left, and good men they are too, willing to go on to the end in poverty and knowing that the end is not far off. They are the men who by their tenacity have contributed much in a certain way to the continuation of canal traffic, these weary years of neglect of their interests and the interests of the state, and they are worthy of all respect, but the time has come when the main chance must be considered and action must be prompt or all is lost.

The committee had in mind all along that there would be a chance of complaint from the boatmen and the interior cities, and has made special provisions for them. In case of the boatmen the plan suggested is believed to cover any objection, and the interior cities will certainly rejoice, for in case of Syracuse, for instance, use is made of Onondaga lake, so that docks are provided inside the city, and other cities are all looked after in some special way. The result is that the canal will cease to be the eyesore it is in so many towns and will furnish the same, or better, accommodations to traffic as before.

There is no doubt that Chairman Clinton had an inkling of the committee's ideas or at least an intuition, when he declared at the meeting that something must be done and done at once, and Attorney Milburn of the steel plant, in urging canal improvement for that interest, went still further and asked the public to be prepared for a big outlay. "The time for moderate measures has passed," he said. "So I am eager enough for an early and thorough consideration of the new plan to forestall the report a few days and ask that nobody make the smallest comment on the plan till the whole is understood. I am in no way doing this by request, but merely by reluctant sufferance, hoping to promote the interest of commerce by urging a consideration of the committee's findings and deductions, made, as they were, from the highest business and engineering standpoint. We have resolved to perpetuate the Erie canal. Let us sink all differences as to method and leave the plan to those who are qualified to speak on the subject."

JOHN CHAMBERLIN.

MANILA HEMP.

It is a singular fact that, owing to climatic and other conditions, the product known as Manila hemp can be grown only in the Philippine islands, now the subject of so much interest to the United States. No other fibre has been discovered which will take its place in vessel use. In another column we print an interesting and important review of the Manila hemp situation, written by Mr. H. F. Lyman, secretary of the Upson-Walton Co. of Cleveland. Mr. Lyman has made special and exhaustive study of this subjcet for some years, and is probably as well posted as any man in America. He has recently returned from London and New York, where he has been in conference with leading authorities in this line, and, consequently, his opinion is entitled to great weight. As will be seen, he looks for no lower prices, at least for some months to come.

WASHINGTON LETTER.

TESTING MORE MODELS OF SUBMARINE BOATS—CLAIM OF THE UNION IRON WORKS—NICARAGUA CANAL BILL—OTHER MATTERS.

During the past week tests of a working model of boat No. 7 of the Holland type, designed by John P. Holland and manufactured by the Holland Torpedo Boat Co., have been conducted in the experimental basin at the Washington navy yard. The model, which is of wood, is a little over 8 feet long, and is exactly one-eighth the size of what the vessel it represents will be. It is stated that the new design No. 7 will have many improvements over the Holland, which has already demonstrated the practical ability of submarine torpedo boats. The new boat will be when completed larger in dimensions than the Holland, will carry five instead of three Whitehead torpedoes and will have a larger radius of action. It is being constructed precisely on the principles of the Holland and the improvements are merely those which experience with the Holland has shown to be advisable. The most notable improvement in the new boat is the introduction of automatic ballasting, which will be available in any kind of water, either salt or fresh, or any admixture of the two. Salt water is 3 per cent heavier than fresh water, and in a boat the size of No. 7 the difference in its displacement betweeen fresh and salt water would be about four tons. This improvement is regarded as a remarkable achievement, as it may be applied to other boats than the type in question. The tests during the past week have been under three conditions: First, the model was shown light and surface running; second, it was tried awash with part of the turret showing, and last, it was tested entirely submerged. The resistance of the hull to water, the wave formations caused by its progress, and the wake created thereby, were carefully examined in order to discover if there was very much agitation, especially in the latter respect, so that an endeavor might be made to correct it if discovered to exist. Similar tests of the Plunger and Holland are now in preparation.

The senate committee on claims has submitted a report on the bill for the relief of the Union Iron Works of San Francisco in the Monterey matter. The report says that in view of the strong equities of the contractors, and of the precedents already established in similar cases, the committee agrees with the secretary of the navy that the penalties should be remitted and the bill reported favorably with the recommendation that it pass. This case arises out of the technical failure of the Union Iron Works to maintain the horse power required by their contract for the Monterey during the official trial. The contract requirement was that an indicated horse power of propelling engines, air pump and circulating pump engines of 5,400 should be maintained for four consecutive hours. The total horse power developed by these engines during the trial was only 5,071.77, though for an hour and three-quarters the power was maintained above that required, and then fell off, owing to inefficient firing of the boilers. By reason of this deficiency in horse power of 328.23 a deduction of $32,823 was made from the amount paid the contractors on the basis as provided in the contract of $100 per indicated horse power which the contractors should fall short of the required 5,400. The evidence shows that this failure to develop the full horse power during the contract trial was due, not to any lack of power of the engines, which the contractors claim are fully capable of developing the 5,400 horse power and more, but to inefficient firing and attendance upon the machinery. The navy department admits the correctness of this claim.

Secretary Long has written a letter to the house naval committee in regard to the policy of assigning line officers to engineer duty and former engineer officers to line duty in accordance with the intent of the personnel law. The secretary says:

"Referring to what was said when the members of the house committee on naval affairs called on me, and especially to the suggestions of Mr. Butler, I find that on Dec. 15 last orders were given out that a line officer who has not previously been in the engineer corps and who is next in rank to the navigator of each vessel, shall, where there is no officer for regular engineer duty, be assigned to duty in charge of the engineer department of the ship, instead of having charge of a line division. The policy of the department is, in order to carry out the spirit of the personnel bill, to give former engineer officers who are hereafter to perform line duty, relief from engineer duties at sea, in order that they may have every opportunity to prepare themselves to pass the examination required for line duties. This seems justice to them. Then, further, the policy is, pursuing the same end, to provide that at least one officer on every ship who has always been of the line shall be assigned to duty in the engineer department, so that he may get that experience; in other words, that former engineer officers, who are hereafter to do line duty, may learn line duty and line officers may learn to do engineer duty."

The house committee on interstate and foreign commerce has instructed Chairman Hepburn to favorably report to the house the bill for the construction of the Nicaraguan canal. The bill as it will be reported to the house, except in some minor particulars, will be the same as the one which passed the committee stage at the last session of congress. There was some discussion in the committee as to the wisdom of waiting for the Walker commission to report, but it was finally decided that this commission could add little to the information already in hand. It is known, however, that there are several members in the house who are extremely anxious that this commission shall be given time to make a thorough report.

Representative Clark of New Hampshire, from the committee on foreign affairs reported to the house on Monday a resolution which was adopted calling on the secretary of state for information relative to the treaty of 1817 between Great Britain and the United States which prohibits the presence at any time of more than one warship on the great lakes. Secretary Hay has already outlined in the Review the reason why this treaty has not been abrogated. The High Joint Commission declines to take it up as a separate issue. The secretary will shortly put in the possession of congress all information concerning the steps which have been taken through diplomacy to abrogate the treaty.

AMERICAN SHIPPING BILL.

ARGUMENTS BEFORE THE SENATE COMMITTEE ON COMMERCE IN FAVOR OF ITS PASSAGE—GREATEST EFFORT EVER MADE IN BEHALF OF OUR MERCHANT MARINE.

WASHINGTON OFFICE MARINE REVIEW, 1345 PENNSYLVANIA AVE.,
WASHINGTON, Jan. 17, 1900.

Consideration of the bill for the promotion of American merchant marine is now being given by the senate committee on commerce. At the first session on Friday the opening argument was made by ex-Senator Edmunds, who represents the shipping interests and who spoke in favor of the passage of the bill. The bill continues to be known as the Hanna-Payne bill though in fact it was introduced in the senate by Mr. Frye. In addition to the committee those who were present at the opening session were Louis Nixon, the ship builder of Elizabethport, N. J.; F. T. Thurber of the New York Export Association; H. P. Booth, president of the New York & Cuba Mail Steamship Co.; Theodore C. Search, president of the American Association of Manufacturers; Aaron Vanderbilt, secretary of the American Shipping League; A. R. Smith, secretary of the New York State Commerce Commission; C. A. Griscom, president of the International Navigation Co.; Eugene T. Chamberlin, commissioner of navigation; Col. E. P. Wilson and Thos. Clyde of the Clyde Steamship Line, and ex-Senator G. F. Edmunds of Vermont.

Mr. Frye, chairman of the commerce committee, explained at length what measures have been taken in recent years to promote the interests of American shipping and to increase the merchant marine, concluding his remarks with a brief statement of the condition that makes this increase greatly to be desired for the general good of the country. Ex-Senator Edmunds then began his argument in favor of the passage of the bill. In his preface he said that it would be necessary for him to explain his views on the subject of expansion. He stated that while he is an anti-expansionist, and therefore opposed to the policy of the administration on that subject, he believes that expansion is a condition that wi.l have to be met.

"I have never favored the annexation of the Hawaiian islands," said Mr. Edmunds, "but what has been done in that direction cannot be undone, and in view of what has happened there and in the Philippines, it is imperative that the United States appear in the east with large and powerful shipping interests, both for the purpose of building up a large commerce and of protecting American interests. One of the principal objects of this bill is to place vessels of American register upon the same footing as foreign vessels in carrying on trade with the West Indies, the Philippines and Hawaii. Americans never ask for an advantage over rivals in trade and the compensation provided for in this bill is only a fair one."

He stated further that it is desired to provide for fast vessels of large carrying capacity, the reasons for this being not only that it is necessary for large cargoes to be carried and for them to reach their destination quickly, but that vessels of this class can easily be made available for use in time of war.

Mr. Louis Nixon stated the needs of the foreign carrying trade of the United States and urged the passage of the bill as the only means of building up this trade. Replying to questions Mr. Nixon said that foreign ships of war were built in American yards because the yards of Europe were busy, because it was policy and because the Americans built the best warships in the world. As to the wisdom of encouraging the merchant marine, Mr. Nixon called attention to the rapid growth of Germany's marine under the subsidy system.

The remarks of Mr. Thomas Clyde at the first session were largely devoted to the technical side of ship building and ship operating. He held the floor also on Saturday when the committee resumed its session. He began by saying that he would attempt to answer a question that had previously been asked by Senator Clay as to the relative cost of operating and maintaining vessels sailing under the American and under foreign flags. He referred to statistics that had been furnished by the commissioner of navigation to bear out his statement that the expenses of American vessels are much the greater, and that one of the necessities for a subsidy is to make up for this excess and thus to prevent financial considerations from inducing owners of American vessels to procure foreign registration.

"The cost of manning a vessel," said Mr. Clyde, "is at least 75 per cent. of the total cost of her construction and maintenance and a reference to the rate of wages paid to seamen in this country and abroad will give convincing proof that in this important particular American shipping corporations are under far the heavier expense."

Continuing on this subject Mr. Clyde claimed that the cost of construction of a vessel in this country is much greater than abroad and in fact that nearly every item of expense in shipping is greater here. Referring to statements that have been made that the subsidy bill was drawn up in the interests of fast vessels, Mr. Clyde offered comparisons to show that a vessel of large carrying capacity and a slow rate of travel would receive a much greater benefit from subsidies than a fast mail and passenger steamer having less carrying capacity. He stated further that vessels of about 14 knots speed would be the greater beneficiaries under the act and suggested that it would be advisable to insert a provision to give extra subsidies to vessels of the regular "tramp" class which average 10 or 11 knots.

Senator Elkins asked Mr. Clyde what in his opinion would be the immediate result of the passage of the bill, receiving the reply that it would cause a gradual increase of more than 1,000,000 tons in American shipping.

"Would our tonnage ever equal the 8,000,000 tons of England?" asked Senator Elkins.

"Yes, sir," was the reply, "there is no reason why it should not exceed it."

In response to a suggestion that England might retaliate by subsidizing her own shipping, Mr. Clyde said that that would do her more harm than good, for the reason that it would be impossible for her to pay each of her great numbers of ships an amount equal to that paid to our smaller number.

"Do you think that $9,000,000 a year will be enough to carry out the provision of the bill?" asked Senator Frye.

"I think it would be wise to make the limit a larger one," replied Mr. Clyde, "for while I believe with Mr. Nixon that there should be a limitation, I think that it should be made large enough to permit the payment of all subsidies for the first few years, after which the amount required would gradually decrease."

Mr. F. B. Thurber of New York, representing the United States Export Association, was the next speaker. He said that he favored the passage of the bill, not as a ship builder or a ship owner, but because of its effect on trade interests. Mr. Thurber confined his remarks to this line of argument and explained fully the results that would accrue to both producers and exporters.

Mr. Theodore A. Search, president of the National Association of Manufacturers, submitted a carefully prepared statement of his views on the bill. He said: "A commanding motive for my great interest in this measure, as the head of the National Association of Manufacturers, is my solicitude for what is a very important branch of manufacturing industry. The construction of ships is an enormous business. Consider for a moment what ascendancy in respect to such an industry would mean to this country. First steady remunerative employment to tens of thousands of persons. Second, profitable investment for large amounts of capital. Third, immense expenditures for supplies and materials—steel plates, machinery and a great variety of products of use in the manufacture of a ship. The demand for the metals of which modern ships are largely built would be reflected in the important metal industries that are now coming to be the backbone of the country. The United States has taken its place definitely among the export manufacturing nations, and its manufacturers desire that its ships may be at hand at every port to take their goods away to other markets. The American ship, whose home is on this side of the Atlantic, can perform these duties better than the foreign ship. That foreign ships in the last fiscal year carried more than 90 per cent. of all our foreign trade by sea is not proof that they did not do their work well; it is also not proof that it might not have been done very much better in our own vessels sailing under our own flag.

"I have still to speak of another matter which perhaps manufacturers are in a position to understand better than other people. This is in respect to the influence on trade expansion which is implied in the very existence in foreign countries of the executive offices and agencies of American steamship lines. An American line to Hamburg or Shanghai, for instance, must maintain offices in those cities and at the various ports of call. These offices would be manned by Americans trained and bred in a knowledge of American institutions. The establishment of the German lines to the far east with a steady growth of German commerce in parts of the globe where it was formerly unknown is proof enough to an open mind of the great value of a strong merchant marine.

"There are just three ideas underlying this bill. The first of these is that it will strengthen the nation's naval and military power by providing transports and auxiliary cruisers to the government and by training young Americans in seamanship so that they can be transferred on short notice to men of war; the second is that the government will by these payments free itself of further costs in discharge of the great business of carrying the mails; and the third that it will develop an important native industry—that of building ships—and extend our foreign trade."

The bill was further considered on Tuesday of this week when Mr. W. F. Thurber of New York made a very strong argument in its favor. John C. Hanley, president of the National Cotton Growers Association and executive agent of Allied Agricultural Associations, also presented a very strong and extended argument in favor of the bill.

As the shipping bill is an administration measure it is generally believed here that it will pass both houses during the present session.

VICTORY FOR DRY DOCKS OF MASONRY.

Washington, D. C., Jan. 17.—Great impetus has been given during the present week to the movement to change the construction of dry docks at League and Mare islands from timber to stone or concrete. The bill for this purpose will be unanimously recommended to congress by the committee on naval affairs and an effort will be made to secure its passage immediately. Various influences contributed to this end, not the least of which was Secretary Long's letter emphasizing the advantage of stone over timber docks and the earnest recommendations of Rear-Admiral Mordecai T. Endicott, chief of the bureau of yards and docks, to the same purpose. In urging the change before the committee Rear-Admiral Endicott presented even stronger arguments than are contained in that part of his annual report which deals with the subject and which was printed in full in the Review a few weeks ago. Secretary Long indorsed everything that Rear-Admiral Endicott said and commended the bill to the favorable consideration of the committee. Without a dissenting vote the committee on naval affairs directed that the bill be reported favorably to the house. An effort will be made to obtain unanimous consent for immediate consideration, as the passage of the bill is urgent. No work can be done upon the docks until the existing contracts are changed to meet the new plans and specifications for material. If the work of construction is not to be delayed it is important that the bill have special order in the house. Indeed there is no opposition manifested to it anywhere and it is quite likely that the bill will be passed during the present week and signed by the president before the end of the month.

The excess cost of construction for both docks with the changed material is estimated at $700,000. In this connection it is pertinent to chronicle that unofficial information has reached the navy department that timber dry dock No. 3 at the New York navy yard is in bad condition. There is palpable evidence of deterioration of the foundations. It is this dock that came near going to pieces with the battleship Massachusetts just before the war with Spain, and the costly ship was saved only through the promptness with which she was floated out of danger.

The Nickel Plate road is the peoples' route and the road that gives best service at the lowest rates. A peerless trio of through express trains daily, palace sleeping cars, unexcelled dining car service, elegant equipment, these are the synonyms of the Nickel Plate's success. 8, Feb. 6

HEMP SUPPLY AND PRICES.

The daily and trade papers have said so much lately about the pressure that is being brought to bear on the authorities at Washington, in order to secure the opening of the Manila hemp ports, that we judge it of interest to set down, as nearly as possible, the true situation regarding the visible hemp supply and the probabilities as to further receipts and the price of hemp, in the near future.

To obtain a better insight into the present condition, it is necessary to compare statistics with those of a few years past, when conditions were normal.

The total production of hemp for the years ending Dec. 31st, 1896 and 1897, were 809,000 and 848,000 bales respectively, the largest production of any two years to date.

In spite of this increase in production, however, owing to increased demand caused by improved trade conditions and the extremely low prices prevailing for hemp and thus for rope and twine, the stocks of hemp at primary points Dec. 31st, 1897, had decreased 70,000 bales from the year before, and stocks in Great Britain and the United States had decreased 15,000 bales, leaving stocks at Manila of 154,000 bales and in Great Britain and the United States of 80,000 bales. in addition to large stocks held by manufacturers.

The breaking out of hostilities at Manila in the spring of 1898, and the consequent disturbances ever since, have reduced the receipts of hemp at primary ports so that in 1898 they were but 742,000 bales and in 1899 only 493,000 bales, a shortage in supply of 461,000 bales in the two years, as compared with receipts for 1897. To offset this shortage, the high prices of rope and twine have caused a much smaller demand during the last two years, owing to greater economy in use, reduced stocks of rope, and the substitution of other fibres.

Notwithstanding this falling off in demand, the stocks of hemp in the three countries referred to, aggregating 234,000 bales, have been drawn on until on December 31st, 1899, they were reduced to 2000 bales in Manila and still less in Great Britain and United States, while stocks in the hands of manufacturers are almost nothing compared with a year ago. These facts have prevented any very great shortage of supplies to date, but have caused a great deal of hemp of inferior grades to be used, these lower grades having probably constituted the bulk of the stocks at primary points, and on goods made from these grades by some makers, the occasional cutting of prices has occurred.

To sum up the conditions, on January 1st, 1900, there were no reserves in ports or in the hands of manufacturers, sufficient to be depended on for supply, the only hemp in sight being that now afloat, amounting to 120,000 bales on that date and due any time before April or May next, and all sold.

This amount is only about one-eighth of the consumption in 1897, and were the prices as low, the demand would undoubtedly be much greater than in that year, so that the visible supply, together with manufacturers' stock, if evenly distributed, would not keep the factories supplied two months, in the season when much the largest portion of hemp is needed. The fact that the bulk of this supply is coming to the United States will not help lower prices, since owners will sell the hemp to other users if that is more profitable than to make it up. This was actually done this week, and a quantity of hemp shipped back to England.

In addition to the amount of fibre received and shipped from the primary ports during the last two years, there has undoubtedly been something of an accumulation of hemp at various points since the ports were last closed. The estimates as to the amount of this hemp, vary from 150,000 to 300,000 bales, but they are very uncertain.

Of this amount, probably 100,000 bales have been sold to be shipped as soon as possible after the ports are opened and some also with positive date of shipment, seller assuming the risk of ports opening, but date of shipment run to April and May next.

There seems to be a general impression that all that is required is to have the ports opened and hemp will at once begin to flow into the United States and England and supplies be plentiful and prices low. The facts are that should the principal ports be opened even as early as Feb. 1st, which is very doubtful, and vessels secured to take the hemp to Manila to be baled for shipment, and steamers secured to take the hemp from Manila to Hong Kong for re-shipment by steamer to England and then to the United States, or even direct from Manila to the United States, at least one month will be required before shipments can begin and from two to three months additional before the hemp begins to arrive.

The first 10,000 bales or more shipped must be that already sold, so that it will be July or August before any hemp arrives that is now unsold. What the cost of this will be will depend, of course, upon the amount of supply that proves to be on hand in the interior and the amount of work being done there in preparing new supplies. Unless the natives have changed in character, experience has demonstrated that the supplies will be lessened rather than increased by high prices, as they are thus obliged to do less work in order to obtain the amount of money needed to supply their simple wants.

Some considerable time also must elapse before affairs in the interior become settled so that regular work can be resumed in all places. While hemp to arrive—say next August or September—is now offered at about three cents per pound less than "spot" hemp, this still means high prices for rope as compared with any except those of very recent date. It is, therefore, clear that those who anticipate any material reduction in prices this season, or any arrival of hemp in time to effect prices of binder twine this year will probably be very much disappointed.

Should first shipments of hemp be delayed beyond dates mentioned, prices may advance indefinitely on stock in sight, and consequently on rope, while dependence on sisal for binder twine will be likely to cause a demand for that fibre that will lead to a still further advance.

H. F. LYMAN.

Cleveland, Jan. 17, 1900.

The Standard Varnish Works, New York City, has just issued a calendar that is not only highly artistic but decidedly novel as well. An ingenious circular device enables the current month to always be kept uppermost.

BILLS OF A NAVAL AND MARINE KIND.

Washington, D. C., Jan. 17.—The committee on commerce has recommended for passage the Frye bill relating to lights on steam pilot vessels. The bill provides that a steam pilot vessel, when engaged on her station on pilotage duty and in waters of the United States, and not at anchor, shall, in addition to the lights required for all pilot boats, carry at a distance of 8 feet below her white masthead light, a red light visible all around and of such character as to be visible on a dark night with a clear atmosphere at a distance of at least two miles, and also the colored side lights required to be carried by vessels when under way. When engaged on her station on pilotage duty and in waters of the United States, and at anchor, she shall carry in addition to the lights required for all pilot boats, the red light above mentioned, but not the colored side lights. When not engaged on her station on pilotage duty she shall carry the same lights as other steam vessels.

Representative Brick has introduced a bill authorizing the president, upon the application of the governor of any state having sea coast line or bordering on one or more of the great lakes, to direct the secretary of the navy to furnish one well-established military school in that state, desiring to afford its cadets instruction in elementary seamanship, one fully equipped man-of-war's cutter for every twenty cadets in actual attendance and such other equipment as may be spared and deemed adequate for instruction in elementary seamanship.

Representative Cummings has introduced a bill to adjust the rank and pay of certain officers of the navy. The bill provides that all commissioned officers of the navy with creditable records who served during the civil war and who were placed on the retired list prior to June 30, 1899, shall receive the same pay as the commissioned officers of the navy of the same grades who have been retired since June 30, 1899.

Senator Cullom has introduced a bill authorizing the president to invite the International Congress of Navigation to hold its ninth session in the Congressional Library in congress. The sum of $25,000 is to be appropriated for expenses. The eighth session of the International Congress of Navigation will be held in Paris in July, 1900.

Dr. Walter Wyman, supervising surgeon-general of the marine hospital service, has asked congress for an appropriation of $2,500 for the erection of an isolation ward and mortuary for the marine hospital at Cleveland. The secretary of the treasury approves it.

Representative Dayton has introduced a bill granting to every employe of the navy yards, gun factories, naval stations, and arsenals of the United States government thirty days' leave of absence each year with pay. Absence on account of sickness is to be deducted from the leave.

LAUNCH OF THE DEUTSCHLAND.

Last week witnessed the launching at Stettin of the new Hamburg-American liner Deutschland, the second largest vessel in the world. The new vessel is 686½ feet over all 67½ feet beam and 44 feet deep. She has bilge keels. According to her builders, the Vulcan Ship Building Co., the Deutschland will be the speediest ocean liner in the world. They have guaranteed to the Hamburg line that the vessel will average 23 knots, which means that passengers from New York for London and Paris will reach their destinations in six days, by way of Southampton and Cherbourg respectively. The new liner will be fitted with two six-cylinder quadruple expansion engines of 35,000 indicated horse power. Steam will be supplied from twelve compound boilers having eight furnaces each and four single boilers with four furnaces each. The boilers are to provide steam at a pressure of 230 pounds per square inch and it is anticipated that the vessel will be capable of attaining a maximum speed of 25 knots. The Deutschland is fitted with a complete Blake pump equipment, including twin air pumps similar to those on the Kaiser Wilhelm der Grosse, the largest ship in the world.

This vessel was named by the minister of foreign affairs, Count Von Bulow, who made a rather lengthy address on the subject of the German merchant marine. In his speech Count Von Bulow dwelt upon the powerful development of the Hamburg-American line, which, he said, with the North German Lloyd, had during half a century grown to be the greatest shipping company in the world. The new ship today added to their fleet, he continued, was to run on that high road of North Atlantic traffic which connected Germany with a friendly nation, the United States.. The ship had been built at the Vulcan dock yard, which began its career in as modest a way as the Hamburg-American line, and now provided foreign navies with every type of ship. The Deutschland was intended to be the most powerful ship in the world and to surpass in speed all vessels afloat. As the capability of the Hamburg-American line and the Vulcan yard increased, Germany, during the same period, began to regain what had been lost since the days of the Hanse. Since the decline of the latter, which went into ruin because the old empire did not afford it adequate support and because then the German merchant was not sufficiently backed up by the state, Germany had turned away from the sea. It was not until after the nation had regained its unity as a state, through the great emperor and his immortal advisers, and the spirit of sacrifice and patriotism upon the part of all races and classes of the German people, that it again entered the theatre of the world. Germany's present transoceanic policy was evolved from her mighty economic revival, which, in its turn, was the outcome of the creation of the empire. When German labor had won for itself a position in the markets of the world Germany's foreign policy had to follow the development of her economic forces. Germany's present transoceanic policy and world policy necessarily resulted from her economic growth. Germany felt more and more that a nation which allowed itself to be pushed away from the sea would stand aloof from the busy life of the world. Germany, whose commerce during the last four decades had risen from two and a half milliards in 1860 to eight and a half milliards in 1897; who within thirty years had increased fifteenfold the tonnage of her merchant navy and who had moved up into second place in the shipping trade, ought not to remain behind in economic or political rivalry.

Officers of the American Ship Building Co. discussed their affairs in Detroit just previous to the meeting of Lake Carriers.

A VICTORY FOR CRAMPS.

Much food for thought is afforded the British ship builders, who are constantly being subjected to the tyranny of trades unions, by the success of the Wm. Cramp & Sons Co. of Philadelphia in coping with a strike, which, according to claims made at its outset, was designed to virtually suspend all work at the Philadelphia plant. The strike has been in progress for half a year and the men have almost exhausted their benefit fund, while the company has been scarcely inconvenienced. Indeed there are now employed at the Cramp works more than 2,100 men or fully 30 per cent more than when the strike was declared. All through the strike period repair work has been exceptionally heavy, but the work has invariably been gotten out on time. In the past six months repairs and alterations have been made on more vessels than ever before in a similar space of time. The Miami was overhauled and her cabins rebuilt. The Havana came from the West Indies after a hurricane and underwent extensive repairs including the construction of a deck house. Alterations were also made in the engines and boilers and on the hull of the Orizaba. The United States transport Thomas was practically reconstructed two days ahead of contract time; the Seguranca was thoroughly repaired, and the Russian cruiser Variag, which was recently launched, is only awaiting her ordnance from Russia to make her trial trip. This is only a small part of the operations of the Cramp works within the period referred to, but it serves to show the kind of large jobs that have been disposed of.

ITEMS OF GENERAL INTEREST.

Capt. S. R. Chamberlain of the new firm of vessel and insurance agents, S. R. Chamberlain & Co., No. 6 Sherman street, Chicago, mingled with all the vessel men at the annual meeting of the Lake Carriers' Association.

The navy department has practically decided to go ahead with repairs to the battleship Texas, which have been in contemplation for some time past. The work will not be undertaken, however, until after the return of the vessel from her southern cruise.

A cablegram from London states that Prof. C. V. Boys in the opening lecture of the Royal Institution on Wednesday announced that a torpedo boat destroyer had, the day previous, attained a speed of 35½ knots. The Viper, the new vessel fitted with Parson's turbine engine, was, of course, the craft referred to.

The steamer Kaiser Wilhelm der Grosse has again lowered the transatlantic record. Her latest voyage from New York to Cherbourg was made in 5 days and 16 hours or at an average speed of 22.63 knots an hour for the entire distance of 3,077 knots. The old record was 5 days, 18 hours and six minutes.

Mr. John A. Stevens, manager of the sales department of the National Lead Co., 100 William street, New York, announces that Mr. Lynn of Chicago, who was with the Dunham Towing & Wrecking Co. previous to the consolidation of the tug companies, will represent the National company in the marine trade. The Cleveland office of the National Lead Co. is at Canal and Champlain streets. This very large concern, famous for its enormous dealings in all kinds of lead products, has just issued a most artistic pamphlet that deals especially with anti-friction metals.

Major T. W. Symons of Buffalo, United States engineer in charge of the tenth light-house district, advertises elsewhere in this issue for bids for the construction of a steel-frame keepers' dwelling and tower with lantern and fog signal house at the entrance to Maumee bay near Toledo, O. Bids will be opened March 5 next.

Details of organization, officers, etc., of the company that is to take over the Conners' grants of harbor property for grain elevators and warehouses at Montreal have not been given out as yet, but it is announced that the Barnett & Record Co. of Duluth has been given a contract for the first of the elevators, a three-million bushel house at Montreal.

Mention was made in the Review last week of the second preliminary trial of the torpedo boat destroyer Viper, fitted with Parsons turbine engines. An official report now at hand credits the vessel with having attained a mean speed of 34.8 knots in four consecutive runs over a measured mile. The fastest run was 35.5 knots. The contract calls for a speed of 31 knots.

The light-house board at its last session in Washington, while considering the necessity of increased aids to navigation in Alaskan waters, decided that it was necessary to create a new light-house district and recommended that proper legislation should be had for that purpose. Secretary Gage has therefore submitted to the speaker of the house a draft of a bill for the creation of another light-house district on the Pacific coast.

Col. Nathaniel R. Benson, for many years superintendent of the ship department of the Harlan & Hollingsworth Co., Wilmington, Del., died at his home in that city a few days since. Col. Benson severed his connection with the Harlan & Hollingsworth Co. some two years ago, but had just closed a contract to enter the service of a New York ship building firm and was to have left to assume his new duties on the very day on which his death occurred.

The construction of the floating dry dock for Algiers is progressing quite favorably at the works of the Maryland Steel Co., Sparrow's Point, Md. The plates for the end pontoons are down and much of the material is on the ground riveted and ready for use. Traveling cranes have been constructed along both of the side walls. The derricks are being built section by section as the work progresses, and are so constructed that each crane can remove its own derrick when the dock is finished. The navy bureau of yards and docks is pleased with the progress shown.

The new ice breaking steamer Odessa has arrived at the Russian port for which she is named. The vessel was built at Elswick, England, after the design of the Ermack, which was fully described and illustrated in the Review some time ago and which is credited with great service in the gulf of Finland. The hull of the Odessa is constructed of the best steel, and the plates used in the more exposed places have a thickness of one inch. The vessel is 158 feet in length and 42 feet beam. She is lighted by electricity, heated by steam and provided with every form of life saving apparatus.

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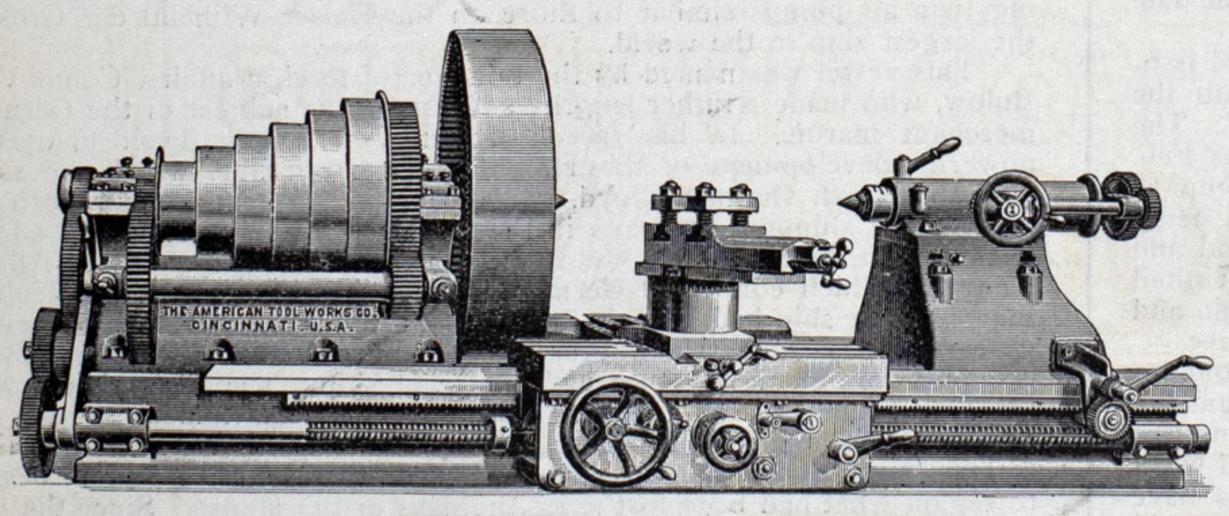

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TOWING MACHINES.

One of the latest of the vessels of the great lakes to be fitted with an automatic towing machine of Shaw & Spiegle kind, manufactured by the American Ship Windlass Co. of Providence, R. I., is the steamer J. Emory Owen, purchased a short time ago by James Corrigan of Cleveland. It is rather surprising that more vessels of about the size of the Owen are not fitted with these machines, in view of the fact that they are regarded as indispensable on the big freighters. Some sixty-six of these machines are now in use, most of them on the great lakes. They are made in five sizes. The No. 1 machine will tow 3,500 to 4,000 tons of cargo with a 1¼-inch wire hawser and it takes up less than 5½ feet square of deck surface. This size is best suited to the freighters of medium capacity; that is medium compared with the 8,000-ton barges of the ore trade on the lakes. Three machines of the No. 1 size have been sold by the Providence company recently—one to go to Portland, Ore., for a steamer building by the Wolff & Zwicker Iron Works at that place, one to go to T. S. Marvel & Co., Newburgh, N. Y., for a tug they are building for the New York Central Railroad, and one to Ohrvikens Aktiebolag, Skelleftea, Sweden.

At the last regular monthly meeting of the directors of the Maritime Association of the port of New York, correspondence was authorized with the officials at Washington urging that no bridge over the East river, New York, be permitted unless it be 135 feet in the clear above high water at any part of the superstructure; recommending the department of commerce in the government at Washington; objecting to the placing of sailing vessels under the jurisdiction of the United States steamboat inspection service, and favoring Senator Frye's bill before congress regulating the boarding of vessels on arrival.

VALUE OF STOCKS—LEADING IRON AND STEEL INDUSTRIALS.

Quotations furnished by HERBERT WRIGHT & Co., Cleveland, date of Jan. 18. 1900.

NAME OF STOCK.	OPEN	HIGH	LOW	CLOSE
American Steel & Wire.....	47	47	46⅝	46⅝
American Steel & Wire, Pfd.....	.....	.....	.....	.....
Federal Steel	50½	50¾	50⅛	50½
Federal Steel, Pfd.....	73	.....	.....	73
National Steel	.....	.....	.....	.....
National Steel, Pfd.....	92¼	.....	.....	92¼
American Tin Plate	29½	30	29½	30
American Tin Plate, Pfd.....	.....	.....	.....	.....
American Steel Hoop.....	.....	.....	.....	.....
American Steel Hoop, Pfd.....	81½	.....	.....	81½
Republic Iron & Steel	20¼	20⅜	20	20
Republic Iron & Steel, Pfd	65	.....	.....	65

What seems to be one of the best devices as yet introduced for signals between deck and engine room was exhibited at the Hotel Cadillac, Detroit, during the annual meeting of the Lake Carriers' Association by a Chicago firm, Osborne & Son. The device is to be applied first to the passenger steamer Manitou of the Lake Michigan & Lake Superior line. Only one set of the machines, that shown at Detroit, have been made as yet. A full description will appear later in these columns.

Ten of the new vessels in lake ship yards are being built under the supervision of the Great Lakes Register of Cleveland, of which Capt. F. D. Herriman is inspector-general. Operations on five vessels that are being rebuilt also come within the supervision of this register.

TREASURY DEPARTMENT, Washington, D. C., January 16, 1900. Sealed proposals are invited and will be received at this department, until 2 o'clock p. m. Wednesday, February 28th, 1900, at which time and place they will be opened in the presence of attending bidders, for the construction of one steel steam propeller for the U. S. Revenue Cutter Service, for duty on the Great Lakes, to be known while in course of construction or until launched, as No. 7, R. C. S. Said vessel is to be constructed in accordance with the plans and specifications provided by the Secretary of the Treasury, which, together with form of proposal, contract, etc., may be obtained upon application to this department.

Bids must be addressed to the Secretary of the Treasury and be endorsed on the envelope "Proposal for Revenue Steamer for Great Lakes." The right is reserved to reject any or all bids and to waive defects if deemed for the interests of the government so to do. (Signed) O. L. Spaulding, Assistant Secretary. Jan, 25

SEALED PROPOSALS will be received at the office of the Light-house Engineer, Buffalo, N. Y., until 12 o'clock m., March 5, 1900, and then opened, for furnishing the labor and materials necessary for completely constructing and erecting a steel frame keepers' dwelling, and tower with lantern and fog-signal house at entrance to Maumee Bay, Ohio, in accordance with specifications copies of which, with blank proposals and other information, may be had upon application to T. W. Symons, Major, Corps of Engineers, U. S. A. Feb. 8.

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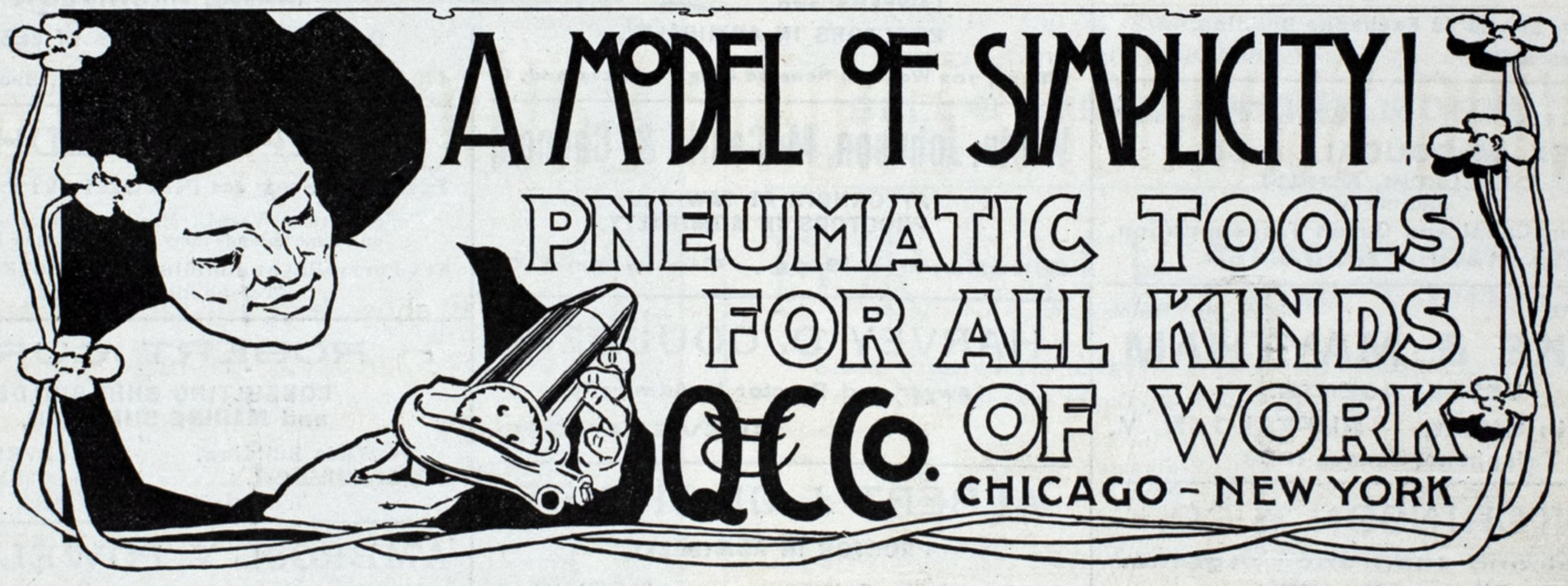

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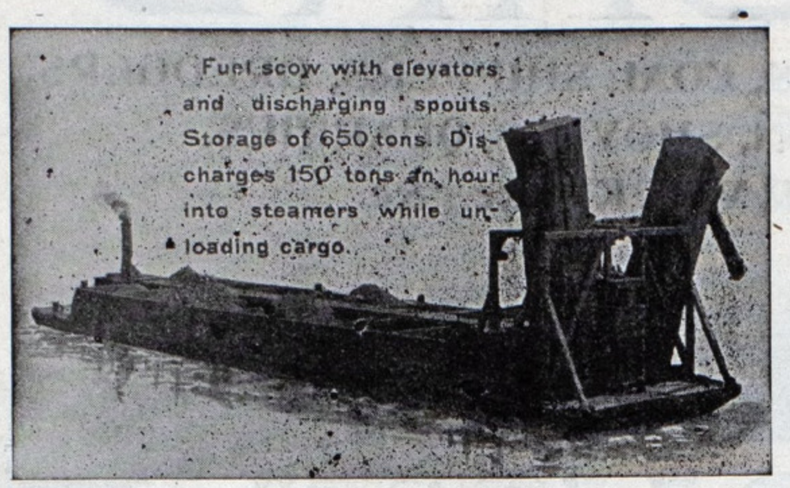
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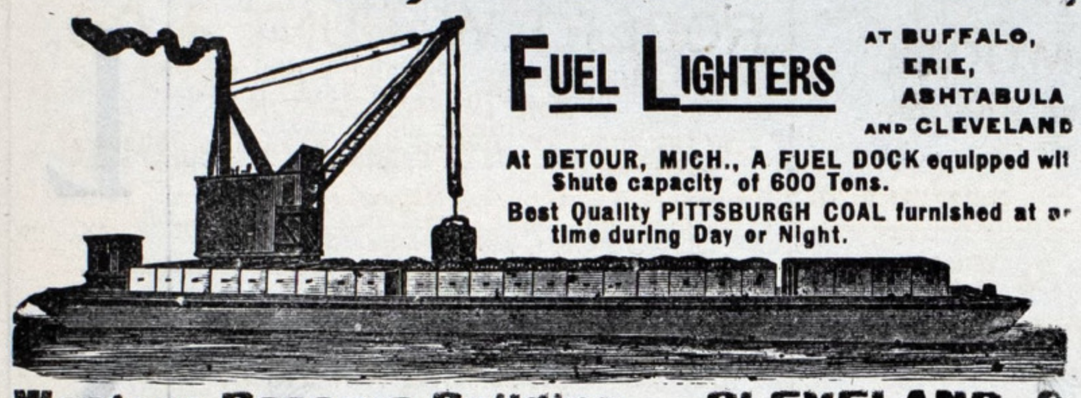

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Office of Engineer, Tenth Light-house District, Buffalo, N. Y., Jan. 10, 1900. Proposals will be received at this office until 12 o'clock noon of Feb. 10, 1900, for constructing store houses, sheds, etc., including preparation of site at the Buffalo Light-house Depot, N. Y. Thomas W. Symons, Major, Corps of Engineers, U. S. A., Engineer Tenth Light-house District. Jan. 18.

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Apply to Bath Iron Works, Bath, Me. Jan. 18.

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150 light direct-connected upright Engine and Dynamo, suitable for boat. Address The Cleveland Box Co., Cleveland, O. Jan. 25.

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One 8x8 Vertical Marine Engine, one 20 H. P. Vert. submerged flue boiler together with heater, pump and fittings. This machinery has been in service less than four months—thoroughly overhauled, and good as new. Address The Root & VanDervoort Eng. Co., Champaign, Ill.

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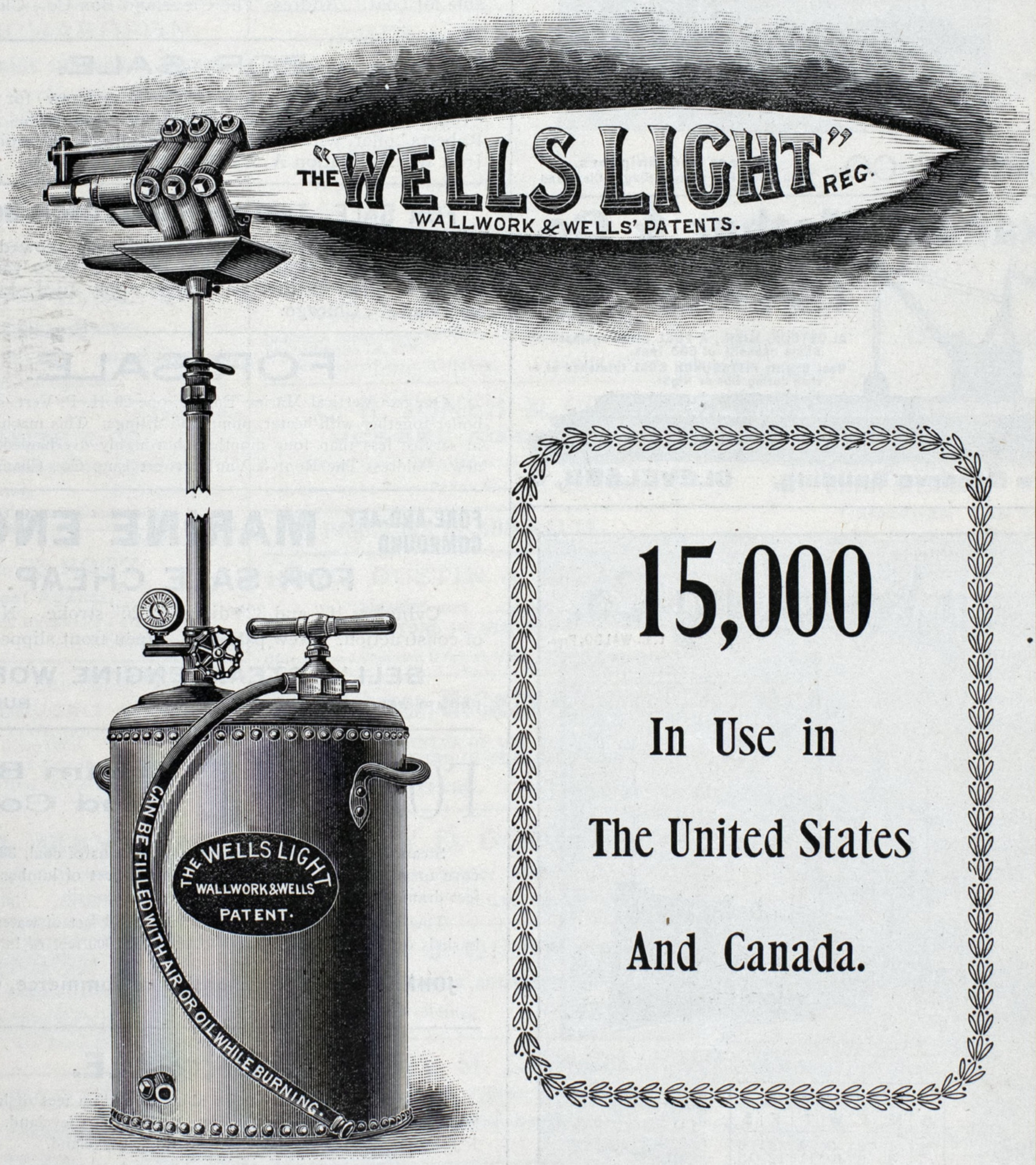
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